Reports-Sanitary. No. 60.

Ac. 11

MINISTRY OF THE INTERIOR, EGYPT.

DEPARTMENT OF PUBLIC HEALTH.

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# ANNUAL REPORT

FOR

1917.



CAIRO.
GOVERNMENT PRESS.

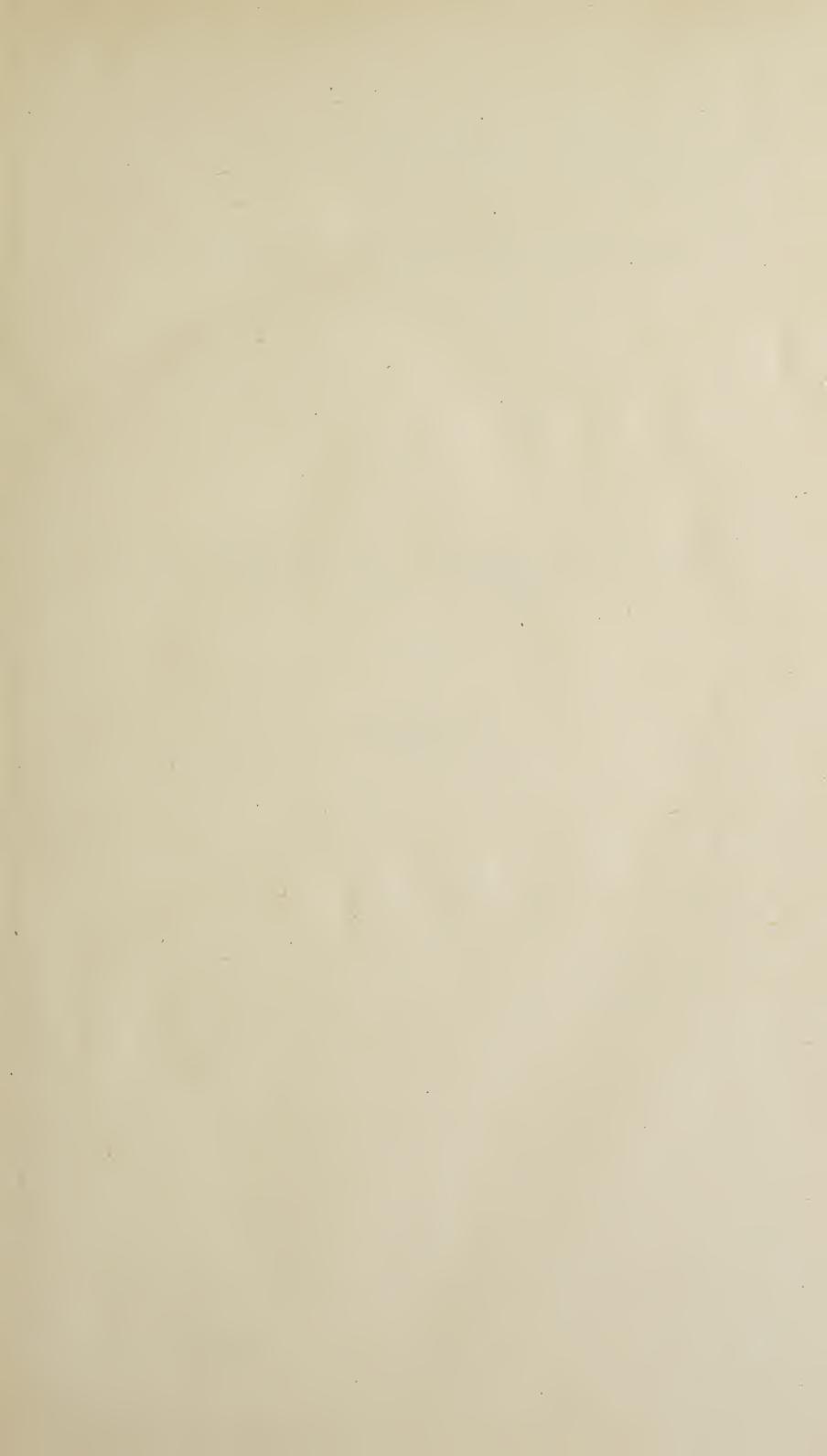
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# ANNUAL REPORT

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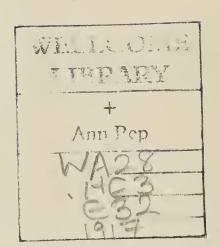
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## ANNUAL REPORT.

#### INTRODUCTORY NOTE.

The Annual Report for 1917 is again but a summary of the year's work of the different Sections of this Department.

The strain of war conditions was very severely felt, but every effort was made, despite a restricted Budget, not only to carry on the duties of this Department vis-à-vis the civilian population of Egypt, but also to afford the fullest aid to the Military Authorities. Although the cost of maintenance in hospitals was heavier, the same tariff was continued for Military cases: P.T. 17.5 per head.

Advantage was taken largely by the Military Authorities of our Analytical, Chemical, and Bacteriological Laboratories staff. Steady progress is being made in the Water Service. Wells and water supplies are registered, charted, and described; this branch of the Service will be one of the first to be developed after the war, or when funds permit. An increase of the staff as soon as possible, in practically every branch of the Department, is imperative.

A more liberal Budgetary Allowance is proposed for 1918.

Cathcart Garner (Colonel),

Acting Director-General.

## I.—REPORT ON SECTION I.

### 1.—VITAL STATISTICS.

The most noteworthy event bearing on this branch of the work which took place during the year was the taking of the Census of the population of the country. This was done in March under the control of the Statistical Department of the Ministry of Finance.

The usual statistical tables concerning the births and deaths of Egyptians and Foreigners are given below:—

TABLE I.—EGYPTIAN AND FOREIGN POPULATION OF THE TWENTY PRINCIPAL TOWNS OF EGYPT.

	•	ESTIMATED	UP TO JULY 1.	
Town.	<b>1916</b> (on th	e basis of the Census	s of 1907).	1917 (on the basis of the Census of 1917).
	Egyptians.	Foreigners.	Total.	Total.
	665,000	75,000	740,000	753,800
Alexandria	327,000	79,000	406,000	442,500
Damietta	36,000	269	36,269	31,200
Tanta	57,000	1,523	58,523	74,200
Mansûra	43,000	1,638	44,638	49,100
Damanhûr	46,000	372	46,372	40,200
Zagazig	37,000	1,691	38,691	41,000
Shibîn el Kôm	26,000	182	26,182	24,100
Gîza	18,000	. 114	18,114	19,000
Benha	20,000	221	20,221	19,000
Port Said	51,000	11,000	62,000	76,100
Suez	18,000	2,551	20,551	33,900
Ismailia	12,000	2,000	14,000	14,000
Faiyûm	42,000	178	42,178	44,200
Beni Suef	31,000	428	31,428	31,900
Minya	30,000	433	30,433	35,000
Asyût	44,000	280	44,280	51,000
Sohâg	20,000	67	20,067	21,900
Qena	21,000	72	21,072	23,000
Aswân	13,000	704	13,704	11,000
TOTAL	1,557,000	177,723	1,734,723	1,836,100

TABLE II.—BIRTHS, DEATHS, AND INFANT MORTALITY IN THE TWENTY PRINCIPAL TOWNS.

## Egyptians, 1917.

				Тот	AL.		INFANT M	ORTALITY.		TION PE	
Town.		-		Thousand.		Thousand.	Under	From 1		under ear.	From 1 to 10 Years.
			Births.	Per Tho	Deaths.	Per Tho	1 Year.	to 10 Years.	To Births.	To Deaths.	To Deaths.
Cairo			30,943	46.5	26,671	40.1	8,321	8,122	26.9	31.2	30.5
Alexandria	•••		16,530	50.5	13,129	40.1	3,996	3,139	24.2	30.4	24.0
Damietta	• • •		1,377	38•3	808	22.4	194	199	14.1	24.0	24.6
Port Said	• • •		2,722	53•4	1,153	22.6	362	296	13.3	31.4	25.7
Suez	• • •		1,150	63*9	1,062	59.0	305	253	26.5	28.7	23.8
Ismailia	•••	• • •	1,226	102.2*	1,954	162.8*	200	165	16.3	10.2	8.4
Benha	•••	•••	588	29.4	556	27.8	176	134	29.9	31.7	24.1
Zagazig	•••	•••	1,582	42.8	1,526	41.2	410	485	25.9	26.9	31.8
Tanta	•••	• • •	2,911	51.1	2,479	43.5	774	631	26.6	31.2	25.5
Mansûra		•••	1,898	44.1	1,540	35.8	373	368	19.6	24.2	23.9
Shibîn el Kôm	•••	• • •	1,073	41.3	708	27.2	171	179	15.9	24.1	25.3
Damanhûr	•••	• • •	2,065	44.9	1,564	34.0	512	490	24.8	32.7	31.3
Gîza	•••		998	55.4	892	49.6	353	256	35.4	39.6	28.7
Faiyûm	•••	•••	2,338	55.7	1,852	44.1	733	565	31.4	39.6	30.5
Beni Suef	•••	• • •	992	32.0	1,019	32.9	294	360	29.6	28.9	35.3
Minya	• • •	•••	1,550	51.7	1,506	50.2	485	492	31.3	32.2	32.7
Asyût	•••	•••	2,249	51.1	2,057	46.8	684	645	30.4	33.2	31.4
Sohâg	•••	•••	1,102	55.1	1,003	50.1	299	435	27.1	29.8	43.4
Qena	•••	•••	1,197	57.0	1,034	49.2	321	347	26.8	31.0	33.6
Aswân	• • •	• • •	468	36.0	481	37.0	128	164	27.3	26.6	34.1
•											
Total	•••	• • •	74,959	48.1	62,994	40.5	19,091	17,725	25.5	30.3	28.1

<sup>\*</sup> The high birth-rate and death-rate are due to the influx, owing to the presence of the Army, of a large temporary civilian population whose births and deaths are registered in and calculated against the normal civilian population figures for the locality.

N.B —The rates are all based on the 1917 Census.

TABLE III.—BIRTHS, DEATHS, AND INFANT MORTALITY IN THE TWENTY PRINCIPAL TOWNS.

## Foreigners, 1917.

			•	Ton	CAL.		INFANT M	ORTALITY.	PROPOR OF INF	RTION PE ANT MOR	R CENT
Town.			Births.*	Per Thousand.	Deaths.	Per Thousand.	Under 1 Year.	From 1 to 10 Years.	1	To Deaths.	From 1 t 10 Years To Deaths
Coinc			499	6.7	640	8.5	85	<del></del>	17.0	13.3	10.6
Cairo Alexandria	• • •	• • •	1,369	17.3	1,027	13.0	134	123	9.8	13.0	12.0
Damietta	• • •	•••	3	11.2	3	11.2			_		
Port Said	• • •	• • •	162	14.7	200	18.5	17	7	10.5	8.5	3.5
Suez			49	19.2	64	$25 \cdot 1$	6	3	12.2	9.4	4.7
Ismailia		• • •	41	20.5	23	11.5	5	5	$12\cdot 2$	21.7	$21 \cdot 7$
Benha			4	18.1	3	13.6		1			33.3
Zagazig			24	14.2	17	10.0	5	3	20.8	29.4	17.6
Tanta	•••		10	6.6	5	3•3		_			
Mansûra	• • •		32	19.5	23	14.0	$\frac{1}{4}$	5	12.5	17.4	$\begin{vmatrix} 21 \cdot 7 \end{vmatrix}$
Shibîn el Kôm	• • •	• • •	3	16.5	2	11.0	_	-	_		
Damanhûr	• • •	• • •	2	5.4			_				
Gîza	• • •		4	35.0					_		
Faiyûm	•••		6	33.7	2	11.2	_	_	_		
Beni Suef	• • •	•••	3	7.0	4	9•3	- constants	1	· ·		25.0
Minya	•••		3	6.9	3	6.9	1	1	33.3	33.3	33.3
Asyût	• • •		3	10.7	5	17.9	1	1	33.3	20.0	20.0
Sohâg	• • •	• • •	2	29.9	1	14.9					
Qena	•••	•••						_			_
Aswân	• • •	• • •	_	· —	1	1.4					_
Total	•••	•••	2,219	12.5	2,023	11.4	258	218	11.6	9.8	10.

<sup>\*</sup> Births of foreigners cannot be considered exact, as they are not all notified.

N B. -The rates are all based on the 1917 Census.

TABLE IV.—General Return of Births and Deaths Registered throughout Egypt, 1917.

	POPULATION.		BIRT	HS.			DEAT	нs.	
GOVERNORATE  OR PROVINCE.	Calculated July 1, 1917.  Egyptians and Foreigners.		Foreigners.	TOTAL.	Per Thousand.	Egyptians.	Foreigners.	TOTAL.	Per Thousand.
Governorates.									
Cairo	753,800	30,943	499	31,442	41.7	26,671	640	27,311	36.2
Alexandria	442,500	16,530	1,369	. 17,899	40.4	13,129	$\left \begin{array}{c}1,027\end{array}\right $	14,156	32.0
Damietta	31,200	1,377	3	1,380	43.2	808	3	811	26.0
Port Said	76,100	2,722	162	2,884	37.9	1,153	200	1,353	17.8
Suez	33,900	1,150	49	1,199	35.4	1,062	64	1,126	33.2
Ismailia	14,000	1,226	41	1,267	90.*5	1,954	23	1,977	$141 \cdot \overset{*}{2}$
Provinces.									
Eastern Desert	17,500	83		83	4.7	92	1	93	5.3
Oases	32,400	1,241		1,241	38.3	1,328	_	1,328	41.0
Sinaï	5,500	281		281	51.1	309	_	309	56.2
Western	8,800	294		294	33.4	522	1	523	59.4
Qalyûbîya	515,100	20,520	5	$\begin{bmatrix} 20,525 \end{bmatrix}$	39.8	16,932	$oxed{4}$	16,936	32.9
Sharqîya	0.40, 200	34,103	32	34,135	36.0	28,661	31	28,692	30.2
Daqahlîya	979,000	39,618	41	39,659	40.5	31,029	29	31,058	31.7
Gharbîya ·	1,651,400	62,753	46	62,799	38.0	52,613	27	52,640	31.9
Beheira	888,700	32,246	7	32,253	36.3	22,221	1	22,222	25.0
Minûfîya	1,071,100	42,595	7	42,602	39.8	33,345	5	33,350	31.1
Gîza	554,100	25,126	б	25,132	45.4	15,648	4	16,652	30.0
Beni Suef	451,900	19,502	3	19,505	43.2	10,764	4	10,768	23.8
Faiyûm	509,600	24,626	7	24,633	48.3	17,362	2	17,364	34.1
Minya	761,000	32,356	3	32,359	42.5	20,498	6	20,504	26.9
Asyût	973,700	45,417	6	45,423	46.6	29,825	9	29,834	30.6
Girga	050 700	36,115	2	36,117	42.1	21,148	2	21,150	24.6
Qena	221 000	32,533	1	32,534	39.1	20,923		20,923	25.2
Aswân	251,500	8,076	_	8,076	32.1	6,067	1	6,068	24.1
			-						
Total	12,662,700	511,433	2,289	513,722	40.5	374,064	2,084	376,148	29.7
Preceding Year	12,148,900	503,953	2,397	506,350	41.7	374,229	2,119	376,348	31.0

<sup>\*</sup> The high birth-rate and death-rate are due to the influx, owing to the presence of the Army, of a large temporary civilian population whose births and deaths are registered in and calculated against the normal civilian population figures for the locality.

## 2.—"ETABLISSEMENTS INCOMMODES, INSALUBRES ET DANGEREUX."

The following table gives details of the applications for licences for establishments, falling under Class 1 of the Law of August 1904 (public and cattle markets included), which were dealt with in 1917:—

TABLE V.—Applications received and Action Taken.

NATURE OF ESTABLISHMENT.	Approved.	Refused.	Applications given up.	Under Consideration.	TOTAL.
Sugar-cane crushing and molasses factories	6				6
Butter factories	1		2	5	8
Rice-husking mills	9	1	$\frac{1}{2}$	11	$\frac{3}{23}$
* Cornmill, rice-husking mill and oil-pressing				11	шU
mill	1				1
Rice-husking mill and cornmill	1	_	_		1
Cornmill, rice-husking mill, sweetmeat factory, and oil-pressing factory	1		_		1
Soap factories	6	1	_	4	11
Public baths	4	_		2	6
Establishment for pounding tan, pomegranate	1				1
peel, etc., for dyeing purposes Stores for mineral acids	$\frac{1}{2}$	_	2*		1.
Duomomer	<i>Z</i>	<del></del>	2		1
D 1 111 C 1 .	3	1	2	9	8
Aerated water and beer-bottling factory	1				1
Sweetmeat factories	4			2	6
Artificial butter factories	1				1
Macaroni factories	1			1	$\frac{1}{2}$
Match factories		_	_	4	$\frac{-}{4}$
Distilleries of perfumes	1		_	1	2
Cotton-ginning mills	8	_	_	12	20
Alcohol factory	1	_	_		1
Lime and cement mill	_	1	_		1
Gypsum-crushing mills	2		_	1	3
Fish-curing establishment	1		_		1
Aerated water factories	12	3		9	24
Oil mills	1	-		2	3
Ice factories	1	_	1	2	4
Ice factories and cold storage establishments	1			1	2
Markets for the sale of fresh fish (wholesale fish halaqas)	$_2$	1	1	$\frac{1}{2}$	В
D 1 1.11.1 1 C 1 11				1	1
Tommonios	4		1	$\frac{1}{\Lambda}$	9
Stores for chemical manure	2	_	#		$\frac{3}{2}$
Cornmill and sugar-cane crushing and mo-	•				_
lasses factory	_		_	2	2
*Glue factory		_	_	1	1
Cornmill and macaroni factory	<del></del> ,	_		1	.1
Rope factory	_		_	1	1
Pottery	_	_	_	1	1
Tobacco factory	_	_		1	1
Food markets		<u> </u>		3	3
Public and cattle markets	15	4		10	29
. Total	93	12	11	87	203

<sup>\*</sup> One returned to Ministry of the Interior, these establishments having been transferred to Public Security Section.

Ministerial "Arrêtés."—The draft Arrêtés laying down additional conditions for establishments possessing permits under the Law of August 28, 1904 (Etablissements Incommodes, Insalubres et Dangereux) were dealt with in 1917 as follows:—

TABLE VI.—MINISTERIAL "ARRÊTÉS."

NATURE OF ESTABLISHMENT	· ·			,	Approved.	Not approved.	Under Consideration	TOTAL.
Alexandria :—		-						
Oil mills  Pastry establishments  Public kitchens  Public bakeries  Public stables  Frying and roasting establishments	• • • • • • • • • • • • • • • • • • • •	•••	•••	•••	3 2 5 9 4 3	  		$\frac{3}{2}$ $\frac{5}{11}$ $\frac{4}{1}$
Cattle sheds	 n <b>er</b> ce	e	•••	• • •	4 	1 1		4 1 1
Groceries Shop for the sale of fresh fish (retail) Butchers' shops	•••	•••	•••	• • •	· _ 8		1 3 —	4 1 11 1
Establishments for frying peas	•••	•••	•••	•••	2			2
	Tor	TAL	•••	•••	45	1	8	54
Gharbiya Province:—  Public bath	•••	•••	•••	• • •	$\begin{bmatrix} - \\ 1 \\ 2 \\ 1 \end{bmatrix}$	  	1 1 —	1 1 2 1
Oil mill	•••	•••	•••	•••		_	1	1
Public bath	•••		•••	• • •	1	_		1
Gîza Province :— Public bakery  Beni Suef Province :—	• • •		• • •	•••	_	_	, 1	1
Tanneries		• • •	• • •	• • •		_	6	. G
Minya Province:— Public bakery					1	_	_	1
Asyût Province :—  Lime-kiln	•••	•••	•••	• • •	-	_	1	1
Public bakeries		•••	•••	•••	2		_	2
Oil mill Rice-husking mill	•••	• • •	•••	• • •		_	1	. 1
	To	FAL	•••	• • •	9	_	15	24

## 3.—MEDICO-LEGAL EXAMINATIONS AND REPORTS.

#### TABLE VII.

LOCALITY.	SLIC	тнт	SERI	ious.	FA	ΓAL.	То	TAL.
A COMPLETE OF THE PROPERTY OF	Accident.	Criminal.	Accident.	Criminal.	Accident.	Criminal.	Accident.	Criminal.
Governorates:— Cairo Alexandria Canal { Port Said	419 2,070 138 45 15 19	8,095 4,783 522 192 90 205	62 482 17 14 6 7	$ \begin{array}{c} 36 \\ 207 \\ 5 \\ 12 \\ - \\ 2 \end{array} $	128 619 26 29 15 22	30 97 2 7 7 7 2	609 3,171 181 88 36 48	8,161 5,087 529 211 97 209
Provinces:—  †Beheira	180 397 325 370 282 156	2,724 $3,739$ $1,915$ $2,151$ $1,316$ $1,373$	112 275 280 175 186 148	205 182 138 84 94 97	364 509 216 286 327 173	80 101 57 28 49 41	656 1,181 821 831 795 477	3,009 $4,022$ $2,110$ $2,263$ $1,459$ $1,511$
Provinces :—         Gîza	136 107 223 182 1,006 170 122 252	1,101 1,377 1,224 1,978 2,582 1,938 1,505 195	$\begin{array}{c} 123 \\ 96 \\ 52 \\ 152 \\ 219 \\ 118 \\ 110 \\ 65 \end{array}$	80 104 105 147 161 131 182 13	158 109 83 232 342 194 226 56	$\begin{array}{c} 25 \\ 43 \\ 56 \\ 75 \\ 123 \\ 56 \\ 44 \\ 7 \end{array}$	417 312 358 566 1,567 482 458 373	1,206 1,524 1,385 2,200 2,866 2,125 1,731 215
* Total	6,614	39,005	2,699	1,985	4,114	930	13,427	41,920

<sup>\*</sup> El CArish is under the Frontier Districts Administration.

## 4.—CEMETERIES AND PRIVATE TOMBS.

## (a) CEMETERIES.

Very little work has been done on cemeteries owing to the absence of personnel on account of the war.

The work actually carried out is as follows:—

TABLE VIII.—Work done in Connexion with Cemeteries during 1917.

Phoyrave	ce or Governo	0.D.4.M.D		CEMETERIES.		OLD CEMETERIES.			
PROVING	CE OR GOVERNO	ORATE.	Established.	Enlarged.	Roads for Cemeteries.	Authorized.	Portion condemned.	Condemned	
Gharbîya Behera Daqahlîya Minûfîya Qaliubîya Gîza Minya Suez Gove	); ); ); ); ); );		1 - 1 - 1 -			$egin{array}{cccccccccccccccccccccccccccccccccccc$		1 - 3 - 2 -	
	TOTAL	•••	3 "	3	1	20		. 6	

<sup>†</sup> Not including Siwa Oasis, which is now under the Frontier Districts Administration.

<sup>‡</sup> Not including Bahariya Oasis, which is now under the Frontier Districts Administration.

Encroachment on cemetery ground is of very common occurrence. Whenever brought to the notice of the Department, legal action is taken against the offender. The following table gives the results of the legal actions:—

TABLE IX.—Legal Actions brought by the Contentieux against Encroachers on Cemetery Lands during 1917.

	· Pr	OVINO	Œ.				Judgment in Government's Favour.	Judgment against Government.	Cases filed.
Gharbîya	• • •	•••	•••	•••	•••	• • •		.—	6
Beheira	•••	• • •	• • •	• • •	•••	•••	2	_	
Minûfîya	•••	• • •	•••	• • •	•••	•••		_	7
Daqahlîya <sup>-</sup>	•••	• • •	• • •	• • •	•••	•••	1	_	5
Sharqîya	• • •	• • •	• • •	• • •	•••	•••	5		18
Qalyûbîya	• •		•••	• • •	•••	• • •			2
Giza	• • •	• • •	• • •		•••	•••	1	_	1
Beni Suef	• • •		•••	• • •	• • •	•••	_	-	2
Faiyûm	•••	• • •		• • •	• • •	•••	4	_	4
Minya	• • •	•••	• • •	•••	•••	•••	_		7
			To	OTAL	•••	• • •	13	_	52

## (b) PRIVATE TOMBS.

Only one special authorization (Minya Province) was given in 1917 for burial in private tombs not situated within cemeteries.

## 5.—"BIRKAS."

The details of birkas belonging to the Government and filled in by private individuals in accordance with the arrangements made with the Government Lands Department are given below:—

TABLE X.-List of Government "Birkas" filled in during 1917.

35 A. A.,	Number		TOTAL AREA.					
Mudîrîya.	Birka:		Qirâts.	Sahms,	Sq. Metres.			
Beheira	10	1	18	9.27	7,417.5			
Minûfîya	2	_	13	20	2,421			
Daqahlîya	6	6	13	4	27,504			
Sharqîya	2	1	18	18	7,481.2			
Gîza	7	3	3	_	13,125			
Faiyûm	2	8	.1	8	33,833.3			
Beni Suef			23	20	4,170.8			
Minya	4	- 1	5	20	5,220.8			

## 6.—MOSQUES.

The following is a statement of the work which has been carried out in connection with the improvement of the ablutionary systems of mosques throughout the country:—

TABLE XI.—Mosques Dealt with in 1917.

DESCRIPTION.	Cairo.	Provinces.	Total.
Ablutionary systems of private mosques newly constructed and opened for use	_	5	5
Ablutionary systems of Waqfs mosques repaired and opened for use	_	_	_
Ablutionary systems of old private mosques requiring repairs:—			
Number opened for use after repair		126	126
" closed for want of repair	_	285	285
" under repair, the delay not having yet expired.	1	' 206	207

#### 7.—PROTECTION OF DRINKING WATER.

Arrêtés were issued and published in the "Journal Officiel" for preventing the pollution of drinking water at the following places: Mahalla el Kubra, Zifta, Benha and Kafr Manâqir, Bilbeis, Simbillâwein, and Minya.

### 8.—SLAUGHTER-HOUSES AND SLAUGHTERING SITES.

No new slaughter-houses were established in the country during 1917.

Slaughtering Sites.—Sites for the slaughter of animals for food, in villages where no slaughter-houses exist, were approved in the following seven villages:—

Village.	•		Marka	ız.	Province.
El Sâlmîya		• • •	Fuwa	• • •	 Gharbîya.
Birimbâl	•••		,,		 "
El Zarqa	• • •		Fâriskûr		 Daqahliya.
'Aga Bandar	•••	• • •	'Aga		 "
Tûkh Dalka			Tala	• • •	 Minûfîya.
El Wât			Minûf		 "
Barrage	,		Qalyûb		 Qalyûbîya.

"Dépotoirs" for Abbattoir Refuse.—No new sites for the deposition of abattoir refuse have been appointed this year.

## 9.—"DÉPOTOIRS."

One dépotoir only has been approved by the Department during 1917, viz. that of Qena.

## 10.—PROSTITUTION.

The following table indicates the places to which the Regulations regarding "Maisons de Tolerance" were applied and also certain information regarding the prostitutes examined during the year:—

TABLE XII.—Prostitution in 1917.

					Number of	Number of		SICK OF	
PLACE.					Prostitutes.	Examinations.	Syphilis.	Gonorrhæa.	Other Diseases.
Cairo { Natives Europeans	•••	• • •	•••	• • •	1,730 519	36,685 16,372	$\begin{array}{c} 335 \\ 24 \end{array}$	1,604 264	190 14
Alexandria	• • •	•••	• • •	•••	1,870	56,671	162	576	209
Fort Said (Europeans	• • •	• • •	• • •	• • •	38	1,692	_	No.	9
Ismailia	• • •	•••	• • •		93 80	$\begin{bmatrix} 2,351\\2,555\end{bmatrix}$	3 3	$\begin{bmatrix} 71\\71 \end{bmatrix}$	80 80
Damietta	• • •	• • •	•••	• • •	3	170			_
Beheira Mudîrîya:—									
Damanhûr	• • •	• • •	• • •		121	2,790	48	125	_
Shubra Khît	• • •	* * *	• • •	• • •	7	334	_		2
Gharbîya Mudîrîya :—					909	10 079	105	0.0	10
Tanta Kafr el Sheikh	• • •	• • •	• • •	• • •	$\begin{bmatrix} 303 \\ 31 \end{bmatrix}$	10,873 648	135 —	$\begin{array}{c} 93 \\ 1 \end{array}$	13
Disûq	•••	•••	•••	•••	22	628	3	_	1
Mahalla el Kubra Kafr el Zaiyât	• • •	• • •	• • •	• • •	$\begin{bmatrix} 55 \\ 52 \end{bmatrix}$	$\begin{bmatrix} 1,466 \\ 1,633 \end{bmatrix}$	$\frac{9}{5}$	$\begin{bmatrix} 4 \\ 4 \end{bmatrix}$	$\frac{1}{9}$
Minûfîya Mudîrîya:—									
Shibîn el Kôm		• • •		• • •	51	655	. 17	5	17
Minûf	• • •	•••	• • •	• • •	17	168	4	5	5
Sharqiya Mudiriya:—					•1				
Zagazig Bilbeis	• • •	• • •	• • •	•••	137 21	$\begin{bmatrix} 7,672\\ 930 \end{bmatrix}$	$\frac{50}{9}$	$\begin{bmatrix} 91 \\ 28 \end{bmatrix}$	36
Ibrahimîa	• • •	• • •	• • •	• • •	43	731	6	33	65
Daqahlîya Mudîrîya :—									
Mansûra	• • •	• • •		• • •	183	3,824	29	105	
Mît Ghamr Simbillâwein	• • •	•••	• • •	•••	$\begin{array}{ c c }\hline 71\\13\\ \end{array}$	$\begin{bmatrix} 1,054 \\ \cdot 469 \end{bmatrix}$	$\frac{17}{3}$	$\begin{bmatrix} 14 \\ 3 \end{bmatrix}$	_ 1
Qalyûbîya Mudîrîya:—	• • •	• • •	•••	• • •	100	100			
Benha	•••				72	3,744	8	35	$29^{\circ}$
Gîza Mudîrîya:—			•••			,,,,,,			1
Gîza					20	222			
Imbâba		•••	•••	• • •	45	553	1	_	
Faiyûm Mudîrîya:—									
Faiyûm	• • •	• • •	• • •		103	3,068	34	21	1
Beni Suef Mudîrîya:—									
Beni Suef	• • •	(* * *	• • •	• • •	31	1,017	20	80	
Minya Mudîrîya:—									
Minya	• • •	• • •	•••	• • •	94 59	4,770	79 11	88	6
Beni Mazâr	• • •	• • •	• • •	• • •	38	1,352	11	1	
Asyût Mudîrîya:—					106	2,966	50	77	6
Asyût	• • •	• • •	• • •	• • •	15	814	$\begin{bmatrix} 50 \\ 6 \end{bmatrix}$	1	
Rôda	•••	•••	• • •	• • •	18 7	959 298	_	1	1
Manfalût Abu Tîg	• • •	• • •	• • •	• • •	51	941		$\frac{1}{9}$	1
Carri	ed for	rwar	d.		6,081	171,075	1,073	3,411	783
- Culti	,,0			• • •	, , , ,	1 -12,010	1,000	, 111	100

<sup>\*</sup> The register having been lost, figures are unobtainable.

TABLE XII.—Prostitution in 1917 (continued).

		Number of		SICK OF	
PLACE.	Number of Prostitutes.	Exami- nations.	Syphilis.	Gonorrhæa.	Other Diseases.
Brought forward	6,081	171,075	1,073	3,411	783
Girga Mudîrîya :—         Tahta	13 75 11 59 18	$\begin{matrix} 686 \\ 2,652 \\ 537 \\ 1,826 \\ 613 \end{matrix}$	- 31 - 32 13	2 18 6 9 4	5 2 4 1
Qena Mudîrîya :—         Isna	43 32 15 8 34 30 90	$1,248 \\ 995 \\ 264 \\ 203 \\ 1,700 \\ 1,320 \\ 1,406$	$ \begin{array}{c c}  & 27 \\  & - \\  & - \\  & - \\  & 5 \\  & 22 \\  & 19 \end{array} $	$ \begin{array}{c c} 27 \\ 8 \\ 7 \\ 16 \\ 32 \\ 37 \end{array} $	4 4 2 4 10
Aswân Mudîrîya:— Aswân	14	615	1	6	12
Total	6,523	185,140	1,223	3,583	835

TABLE XIII.—Number of Prostitutes treated in Government Hospitals during 1917.

	Number of		DISEASES.	
Hospital.	Prostitutes.	Syphilis.	Gonorrhæa.	Other Diseases.
Suez Port Said Damietta Tanta Damanhûr Mansûra Zagazig Shibîn el Kôm Benha Cairo { Hôd el Marsûd Lock Hospital for Natives. Ciaro Fever Hospital Beni Suef Faiyûm Minya Asyût Sohâg Qena Isna  A swôn	. 549 . 391 . 154 . 75 . 312 . 185 . 134 . 177 . 39 . 72 . 2,505 . 302 . 10 . 66 . 56 . 173 . 133 . 106 . 109 . 58 . 19	158 40 3 37 ———————————————————————————————	158 295 71 31 — 130 131 105 91 5 35 1,799 264 — 48 21 88 77 35 81 26 6	233 56 80 7 — 16 — 36 17 29 295 14 9 2 1 6 6 6 5 6 4 12
Total	5,625	1,293	3,498	834

## II.—REPORT ON SECTION II.

#### 1.—GENERAL HOSPITALS.

#### HOSPITALIZATION OF MILITARY PATIENTS.

The year 1917 showed a considerable reduction in the number of military cases treated in the Provincial hospitals (4,548 patients, as against 12,897 during 1916), Suez and Port Said being practically the only hospitals which were retained by the Military Authorities for this purpose.

Suez hospital transferred the native cases to the old Government hospital, and by means of hut and tent accommodation increased their number of beds for military cases

from the pre-war number of 100 to 420.

The total number of military cases treated in the Egyptian Government hospitals since 1915 is 32,832.

The treatment fee of P.T. 17.5 per diem, as arranged in 1915, was adhered to, but, owing to the abnormal rise in food prices, an increase will probably be necessary next year.

#### GENERAL STATISTICS.

The present number of hospitals is registered as twenty-three; this is not really an increase of one hospital, for the hospital at Mersa Matrûh, having been taken over by the Frontier Districts Administration, ceases to be shown in the 1917 list, while the Port Said and Tanta infectious hospitals have been counted as separate hospitals, and figure as such in the list.

The number of beds continues to maintain the marked rise that was shown in 1915, for the purpose of dealing with military cases, and the number of in-patients this year showed a slight rise, as might be expected, to correspond with the increased number of beds.

A satisfactory increase of 4,890 voluntary cases appears in 1916. The number of days of treatment for 1917 was 871,228, as compared with 946,557 in 1916, a decrease of 75,329, which is mainly due to the loss of the military patients.

The average death-rate for all in-patients (military and civilian) was 5.268 per cent

in 1916, and 5.709 per cent in 1917.

The number of new out-patients has increased by 31,121, and the number of out-patient attendances by 78,781, compared with 1916. This very important branch of hospital work may be expected to show a still further increase when extra medical officers are appointed to the hospitals.

#### Cost of Maintenance.

The cost of upkeep of the hospitals for 1917 was L.E. 114,591 · 683 milliemes, as against L.E. 123,379 · 860 milliemes in 1916, a decrease of L.E. 8,788 · 177 milliemes.

This economy resulted from the orders all units received to take every care in avoiding extravagance, and is very satisfactory considering the present high prices of all drugs, dressings, food, etc.

The cost per bed per annum fell to L.E. 29·595 milliemes, a marked decrease from that of 1916 and 1915, which showed L.E. 32·256 milliemes and L.E. 34·591 milliemes respectively, while in 1914 this figure was L.E. 37·098 milliemes.

The cost per patient per day showed practically little change: 131 milliemes in 1917;

130 milliemes in 1916; 134 milliemes in 1915; 135 milliemes in 1914.

The receipts for 1917 amounted to L.E. 21,305.857 milliemes, a decrease of L.E. 27,920.779 milliemes from the amount received in 1916.

This is explained by reason of the marked fall in the number of paying military patients, but even so the amount is nearly three times that received in 1914.

N.B.—The cost of upkeep does not include the expenses of the Central Administration, nor does it include repairs and renewals of buildings.

#### GENERAL NOTES.

In 1917 an electric light plant was installed at Benha hospital, with provision for a complete x-ray apparatus, which, unfortunately, has not yet arrived. The means for accomplishing this was provided by local subscription, and it is an example which it is hoped other Mudîrîya towns will follow, and thus the inhabitants will interest themselves in an institution which, though a Government one, concerns their town life so very intimately.

Three new posts of Second Medical Officers were created at Zagazig, Mansûra, and Damanhûr respectively. This very necessary creation has at once shown good results,

as seen by consulting the number of new out-patients treated at these hospitals.

A further four appointments of *Moawinîn* (stewards) were made at Shibîn el Kôm, Beni Suef, Faiyûm and Minya respectively, thus leaving now only four hospitals without these very necessary officials.

## NEW WORKS AND REPAIRS.

The following new works were commenced or completed during 1917:—

- 1. Alexandria Hospital, completion of pavilion for ninety beds.—This building was constructed and occupied in 1913. The credit granted in 1917 was for painting and colour-washing walls and completion of painting to woodwork. This work, which could not be done earlier owing to the premises having been occupied by military cases, was executed departmentally in 1917 at a cost of L.E. 276.
- 2. Alexandria Hospital, nurses' house.—This building was constructed in 1914 and occupied. The credit granted in 1917 was for painting, which could not be done earlier owing to these quarters having been occupied by extra nurses for military cases. The painting was executed departmentally in 1917 at a cost of L.E. 79.
- 3. Alexandria Hospital, new verandah for out-patients, construction of roads, etc.— A new verandah in béton armé was constructed for the out-patients at a cost of L.E. 355 and L.E. 89 for benches. This work was commenced on August 1, 1917, and completed on October 19, 1917. The main roads of the hospital were macadamized at a cost of L.E. 637. This work was undertaken by the Alexandria Municipality.
- 4. Fever Hospital, Abbassia.—The existing roads have been repaired, and new roads were made at a cost of L.E. 72 for the new pavilions which were constructed in 1916.
- 5. Fever Hospital, Abbassia.—An additional store has been constructed at a cost of L.E. 478. This work was commenced on September 15, 1915, and completed and handed over on January 10, 1918.
- 6. Hôd el Marsûd Hospital.—This hospital has been enlarged, remodelled, and completely renovated. New quarters have been erected for the matron; electric light and an improved water supply have been installed; the drains have been connected to the Cairo sewers; percolating pits have been abolished; a rubbish destructor has been built, and the courtyards have been macadamized and footpaths asphalted. A special credit was granted for these works, which were executed departmentally at a cost of L.E. 3,463.
- 7. Qasr el Aini Hospital.—The steam boilers at Qasr el Aini hospital have been fitted with burners for crude oil at a cost of L.E. 70. An economy of some L.E. 600 per year is anticipated at the present price of coal.

The total amounts spent on hospital repairs and renewals during 1917 was L.E. 4,148, as compared with L.E. 6,494 during the previous year.

The following hospitals were completely repaired and painted during 1917:—
Fever hospital, Abbassia (first-class section), Shibîn el Kôm hospital, Zagazig hospital and infectious hospital, Port Said hospital and infectious hospital; extensive repairs have also been done at Qasr el Aini hospital, as far as funds permitted.

Small repairs were undertaken in the following hospitals:—Alexandria hospital, Asyût hospital, Damanhûr hospital, Minya hospital, and Tanta hospital.

Qalyûb hospital, Shawarby Pasha's Waqfs, has also been repaired and painted through-

out at the cost of the Waqfs.

Amounts spent on repairs and repainting of the general hospitals from January 1, 1917, to December 31, 1917:—

TABLE XIV.—Hospital Repairs, Etc.

			Repairs.	Fitting-up.
			L.E.	L.E.
Fever Hospital, Abbassîya	•••		83	
Alexandria Hospital	• • •		99	_
Asyût Hospital	•••		20	
Benha ,,	• • •		10	41
Beni Suef Hospital	•••		6	2
Damanhûr "	• • •		24	_
Faiyûm Hospital	• • •		11	
Hôd el Marsûd Hospital	• • •		16	_
Kasr el Aini "	• • •		1,198	354
Qalyûb Hospital	• • •		43	
Mansûra ,,			30	
Minya ,,	• • •		26	27
Qena ,,	•••		7	3
Port Said "	•••		364	14
Port Said Infectious Hospital	• • •		209	12
Suez Hospital			111	_
Shibîn el Kôm Hospital	•••		714	
Sohâg Hospital	•••	• • •	3	_
Tanta ,,		• • •	112	
Tanta Fever Hospital	•••		8	_
Zagazig Hospital	• • •		533	
Zagazig Fever Hospital	•••	• • •	68	_
Total	•••		3,695	453
Grand Total	•••	• • •	4,	148

TABLE XV.—Comparative General Statistics.

			•		1916.	1917.	Increase or Decrease.
Number of hospitals  , beds		•••	•••	•••	22 3,825	23 3,872 54, 280	+ 1 + 47
" in-patients treated Of which voluntary patients… Death-rate for in-patients …	•••	•••	•••	•••	55,489 23,332 5:268 per cent.	56,289 28,222 5.709 per cent.	+ 800 + 4,890 +0.441 per cent.
Number of days of treatment, new out-patients		•••	• • •	•••	946,557 $178,788$ $392,961$	871,228 209,909 471,742	$ \begin{array}{r}  - 75,329 \\  + 31,121 \\  + 78,781 \end{array} $
Major operations	• • •	• • •	•••	• • •	8,576 L.E. M.	11,399 L.E. M.	+ 2,823 L.E. M.
Cost of upkeep Receipts	•••	•••	•••	•••	$\begin{array}{ccc} 123,379 & 860 \\ 49,226 & 635 \end{array}$	$ \begin{array}{c cccc}  & 114,591 & 683 \\  & 21,305 & 857 \end{array} $	$ \begin{array}{c ccccc} - & 8,788 & 177 \\ - & 27,920 & 778 \end{array} $

Cost.	
AND	
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XVI.—PA	
E XVI.—PATIENTS	
LE XVI.—PA	
BLE XVI.—PA	
ABLE XVI.—PA	
TABLE XVI.—PA	

Cost per Patient-day.	1917	M.	142	221	18:3	145	101	115	91	131	98	105	111	135	139	1	116	204	113	129	135	103	100	114	154	11:1		131
Cost Patien	1916	M.	134	152	199	1	76	124	1	104	Z	102	111	137	86	236	119	130	174	174	165	123	120	132	187	163		130
		M.	530	599	150	200	707	426	276	737	316	737	210	992	196	1	935	800	813	753	383	592	247	484	f90	236		595
per bed	1917	LE.	100	1.9	55	17	27	40	21	33	53	50	30	09	453	1	34	12	34	15 X	200	13	32	53	42	022		92 031
Cost per bed per annum.	9]	M.	00F	962	732		045	613	1	701	340	545	013	106	925	927	929	992	712	930	282	499	313	407	7.43	315		256
5 -	1916	L.E.	46	27	46	1	25	81	-	42	28	25	30	330	27	28	35	15	533	67	34	33	1	28	1	35.		37
		M.	546	773	526	058	167	122	961	446	876	440	583	601	654	1	541	081	435	212	030	170	303	659	F98	979		683
Cost of Upkeep for	1917	L.E.	17,276	10,818	8,317	578	1,318	4,568	382	2,503	3,517	3,568	2,235	3,285	1,468	1	29,135	7,469	2,158	1,840	2,668	5,329	1,870	1,739	1,219	1,321		860 114,591
of Up		M.	994	411	832		000	461	1	180	Ţ115	192	196	475	437	199	174	499	702	750	533	869	555	050	775	535	1	860/1
Cost	1916	L.E.	19,580	11,674	7,009		1,102	3,662	-	2,690	3,117	4,407	2,220	3,431	676	398	29,736	9,115	3,222	3,744	4,079	6,391	2,313	1,676	1,335	1,518		3,379
of under	1917		$\frac{1,528}{1}$		378	-	273	373		430	410	501	318	229	243	1	4,278		393	162	223	899	202	216	125	26		1,399   123
Number of Operations under Anasthetic.	1916		,587	401	256	1	196	218	1	178	248	216	256	171	997	2	160,	1	046	155	127	500	170	118	68	83		3,576 111
	1917	-	50,364 1		33,918	-	22,908	18,664	.	9,665	11,926	8,427	17,624	5,659	6,195		212,674   3	_ <del>_</del> _	10,871	7,280	14,601	7,535	8,277	5,145	5,900	5,702		471,742 8
Number of Out- Patients' Visits.	1916		56,792				21,987			4,333	12,199						131,476 2		5,653							5,479		392,961
of New ients.	1917		16,899				13,040	5,308		4,962							88,629 1	1	4,737	4,479	4,566		2,611	3,026	2,410	4,039		<u>= 309,905                                  </u>
Number of New Out-Patients.	1916		20,388	5,917	26,580	1	12,045	5,261		2,955	6,285	3,648	3,936	3,055	6,005	250	54,679	1	5,130	3,598	3,945	4,351	2,074	2,740	1,631	4,228		178,788
of Days tment.	1917		121,294	61,613	45,426	3,995	13,069	39,614	4,205	19,030	41,021	34,061	19,631	24,106	10,631	.	250,828	25,436	18,111	14,230	19,750	51,758	18,638	15,278	7,911	11,592		871,228
Number of Days of Treatment.	1916		146,173	76,769	35,264	- [	11,670	29,430	-	25,894	37,925	43,271	19,542	24,937	9,660	1,687	248,791	70,145	18,507	21,486	24,785	52,257	19,188	12,714	7,137	9,325		946,557
er of tients.	1917		10,310	5,021		276	1,002	2,241	372	1,781		2,242	1,162	1,506	957		12,971		966	1,143	1,975	3,083	1,111	924	505	532		56,289
Number of In Patients.	1916		9,989		2,887	85	831	1,944	.	1,438	1,947	2,367	1,111	1,593	932	114	10,361	3,467	1,091	1,568	1,848	3,478	1,223	763	466	505		55,489
Number of Beds.	1917		356	552	150	340	48	113	18	63	120	120	1.7		34	1	834	623	62	<del>1</del> 9	94	272	58	59	67	<u> </u>		3,872
Number	1916		422	420	150	-	+	128	1	63	110	160	74	98	37	#	834	570	09	75	119	272	56	59	25.	43		3,825
HOSPITAL.			Alexandria		Said	Port Said (Inf.)	Damietta	Tanta	Tanta (Inf.)		Mansûra	Zagazig	Shibîn el Kôm	Benha		<b>I</b> atrû	Qasr el 'Aini	Fever Hospital	Beni Suef	Faiyûm	:	•	Sohag	Депа	:	Aswân		Total

TABLE XVII.—In-Patients (Voluntary, Police, and Military).

Hospital.	Volunta	ry Cases.	Police	c Cases.	Militar	y Cases.	1	Number Cases.		Number of Treatment
	1916	1917	1916	1917	1916	1917	1916	1917	1916	1917
Alexandria	6,397	7,305	1,970	2,547	1,232	111	9,599	9,963	146,173	121,294
Suez	1,671	1,891	286	278	3,386	2,699			76,769	61,613
Port Said	1,225	1,492	816	851	750	787	2,791	3,100	35,264	
Port Said (Inf.)	_	83		_	82	192				3,995
Damietta	606	740	195	231		_	801	971	11,670	13,069
Tanta	375	423	1,203	1,638	303	84	1,881	2,145	29,430	39,614
Tanta (Inf.)		365	_		_		r	365		4,205
Damanhûr	576	970	467	774	330	_	1,373	1,744	25,894	19,030
Mansûra	985	1,104	762	836	139	_	1,886	1,940	37,925	41,021
Zagazig	348	672	933	1,356	1,017	124	2,298	2,152	43,271	34,061
Shibîn el Kôm	242	327	776	788	57		1,075	1,115	19,542	19,631
Benha	243	507	713	815	582	• 118	1,538	1,440	24,937	24,106
Qalyûb	667	693	247	234	_		914	927	9,660	10,631
Mersa Matrûh	39		12		60	_	111		1,687	
Qasr el <sup>c</sup> Aini	4,796	6,442	4,927	5,630	210	48	9,933	12,120	248,791	250,828
Fever Hospital	3,058	1,259	255	322	106	29	3,419	I,610	70,145	25,436
Beni Suef	303	529	359	436	395		1,057	965	18,507	18,111
Faiyûm	40	330	405	782	1,081	7	1,526	1,119	21,486	14,230
Minya	85	369	599	789	1,125	56	1,809	1,214	24,785	19,750
Asyût	841	1,520	1,150	1,148	1,404	256	3,395	2,924	52,257	51,758
Sohâg	283	333	447	683	442	32	1,172	1,048	19,188	18,638
Qena	178	358	480	529	81	1	739	388	12,714	15,278
Isna	196	319	159	159	89	1	444	479	7,137	7,911
Aswân	178	221	276	275	26	3	480	499	9,325	11,592
						1				
		•								
-										
TOTAL 2	23,332	28,222	17,437	21,101	12,897	4,548	53,666	53,871	946,557	871,228

TABLE XVIII.—Admissions and Discharges.

	NING	1917	306	169	122	<b>H</b> .	44	81	4	48	85	72	53	52	30	ļ	625	59	35	38	58	108	45	36	19	28	2,118
	REMAINING	1916	346	153	77	1	31	96	1	37	91	06	47	99	98	-	851	64	31	24	61	159	63	36	23	33	2,410
	)ved.	1917	4,871	1,506	1,250		195	130	ಣ	330	657	578	152	310	733	1	4,286	116	124	168	170	727	212	210	80	147	16,956
	Improved.	1916	4,058	658	1,213	ಣ	206	113	1	93	426	373	140	249	739	16	3,677	44	203	228	499	809	261	251	96	92	14,176
RGED.	od.	1917	736	215	141	28	26	129	28	83	153	112	44	54	56	1	872	188	09	47	52	116	37	552	П	19	3,214
DISCHARGED	Died.	1916	662	114	97		33	110	1	84	120	98	, 44	32	35	7	677	439	57	29	51	144	50	96	11	15	2,923
The state of the s	ed.	1917	4,397	3,131	1,664	246	737	1,901	337	1,320	1,136	1,480	913	1,090	168	1	7,188	1,311	777	890	995	2,132	817	641	392	338	34,001
	Cured.	1916	4,923	4,558	1,500	62	561	1,625		1,224	1,310	1,818	880	1,246	129	06	5,156	,2,920	800	1,287	1,237	2,567	849	450	406	365	35,980
	al.	1917	10,310	5,021	3,177	276	1,002	2,241	372	1,781	2,031	2,242	1,162	1.506	957		12,971	1,674	966	1,143	1,275	3,083	1,111	924		532	56,289
	Total.	1916	9,989	5,483	2,887	82	831	1,944	1	1,438	1,947	2,367	1,111	1,593	933	114	10,361	3,467	1,091	1,568	1,848	3,478	1,223	763	466	505	55,489
ADMITTED.	tted.	1917	9,963	4,868	3,100	275	971	2,145	365	1,744	1,940	2,152	1,115	1,440	927	1	12,120	1,610	965	1,119	1,214	2,924	1,048	888	479	499	53,871
ADMI	Admitted	1916	9,599	5,343	2,791	82	. 801	1,881	1	1,373	1,886	2,298	1,075	1,538	914	111	9,933	3,419	1,057	1,526	1,809	3,395	1,172	739	444	480	53,666
	Existing.	1917	347	153	77	1	31	96	2	37	91	06	47	99	30	1	851	64	31	54	61	159	63	36	23	33.	2,418
	Exis	1916	390	140	96	1	30	63	1	65	19	69	36	55	19	က	428	48	34	42	39	83	51	24	22	25	1,823
	Hospital.		Alexandria		Said	(Infectious)		•	ಾ	Damanhûr	Mansûra	Zagazig	ıl Kôm	Benha	Qalyûb	$\sim$	Qasr el 'Aini	Fever Hospital	Beni Suef	Faiyûm	Minya	Asyût	Sohâg	Qena		Aswân	TOTAL

TABLE XIX.—Out-Patients' Division.

	Number o	f Patients.	Number of A	ttendances.
Hospital.	1916	1917	1916	1917
Alexandria          Suez          Port Said          Port Said (Inf.)          Damietta          Tanta          Tanta (Inf.)          Damanhûr          Mansûra          Zagazig          Shibîn el Kôm          Benha          Qalyûb          Mersa Matrûh          Qasr el 'Aini          Fever Hospital          Beni Suef	$ \begin{array}{r} 20,388 \\ 5,917 \\ 26,580 \\ \\ 12,045 \\ 5,261 \\ \\ ^*2,955 \\ 6,285 \\ 3,648 \\ 3,936 \\ 3,055 \\ 6,092 \\ 250 \\ 54,679 \\ \\ 5,130 \end{array} $	16,899 4,824 19,658 — 13,040 5,308 — 4,262 6,697 5,169 3,898 3,865 5,727 — 88,629 — 4,737	56,792 10,763 39,676 — 21,987 15,975 — 4,333 12,199 6,577 16,792 5,732 12,457 350 131,476 — 5,653	50,364 8,367 33,918 — 22,908 18,664 — 9,665 11,926 8,427 17,664 5,659 6,195 — 212,674 — 10,871
Faiyûm           Minya           Asyût           Sohâg           Qena           Isna           Aswân	3,598 3,945 4,351 2,074 2,740 1,631 4,228	4,479 4,566 6,065 2,611 3,026 2,410 4.039	6,775 16,483 6,576 6,811 4,494 5,581 5,479	7,280 14,601 7,535 8,277 5,145 5,900 5,702
Total	178,788	209,909	392,961	471,742

TABLE XX.—Hospital Receipts.

		RECEIPTS.			Haansmir		RECE	EIPTS.	
Hospital.	1	916	191	17	HOSPITAL.	191	.6	191	.7
	L.E.	м.	L.E.	М.		L.E.	м.	L.E.	М.
					Brought forward	33,680	996	15,964	970
Alexandria	7,74	755	1,332	703	Mersa Matrûh	12	510		
Suez	10,38	5 141	7,001	824	Qasr el 'Aini	1,260	988	1,057	158
Port Said	5, 10	1 970	3,849	604	Fever Hospital	904	290	465	810
Port Said (Inf.)			325	125	Beni Suef	1,114	830	212	914
D	6	9 755	112	868	Faiyûm	3,217	890	110	666
Tanta	1,60	8 339	578	483	Minya	2,513	095	588	025
Damanhûr	1,75	4 271	335	490	Asyût	4,350	380	1,854	043
Mansûra	47	3 132	484	567	Sohâg	1,278	945	342	464
Zagazig	3,70	7 376	754	667	Qena	326	818	125	345
01.114 1.774	53	7 332	190	490	Isna	362	612	268	915
Benha	2,24	7 917	968	332	Aswân	203	281.	315	547
Qalyûb	5	5 008	30	817					
Carried forward	33,68	0 996	15,964	970	Total	49,226	635	21,305	857

	TOTAL.	$\begin{array}{c} 949 \\ 58 \\ 1,117 \\ 872 \end{array}$	240 419	358 502 126 1,184	646 302	511 335	148 169	94 43 199	458 106 329 702	506 879
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	.snsI	2 1 1 4	1 4	6   6	5	15		1	∞ H 01	41
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	Sobûg.	18 3	1 0	24 67	9	e0	13	87 6	000110	11 26
	.tûysA	9 0 0 0 7 0 7 7	10 1-	17 14 5 5 63	25.	40	967	1 8 33	27 7 10 56	19 71
-	Minya.	121	4.61	8 H 4 2	ि	10		4 8	15	21
-	Faiyûm.	£	01 स	· n   n o	- I	०० व्य	1 1	H 4	10	
	Beni Suef.	1 / 1		m   c		5	<u>س</u> ا	===	च ला ल ल	4 10
	Fever Hospital.			21	1 1		11			
	Gasr el chini.	331 282 282 214	168	64 149 44 438	389 239	170	20	22 3 26	45 54 222 270	19 19
-	Qalyûb.	9   6.11	୍ଦ୍ର ହମ	2000	6 +	16	800	44	10 20 20	43 51
	Benha.	26 30 120 120	चा न	v 4 v 0	401	16	ಬಲ	ਜਜਨ	18	87
	Shibîn el Kôm.	08   46		25   8	1 !	21	<del>-</del>		12	14 24
	-zizazaz	014120	007	9 - 2 - 3	<b>⊣</b> !	18	4	1   0	32 6 130	22 35
-	Mansûra.	1 60 Cl	11	99   न	[-	241	401		28	79
-	.1ûdasmsU	112%	21	21   12	1 00	55.0	16	4	13 15	20 15
	Tanta (Infectious).			1111		11	1 1		1111	11
	.eineT	25 18 39	, m	30	13	15	12	433-1	13 10 10 25	17
	Damietta.	. 28	700	юп <u>4</u> 6	10	15	6	∞	21010	24
	Port Said. (Infectious).			·	11			111	11,11	
	.bis2 tro4	. 557 788 787 787 787	01.0	0.0 3.0 4.1 4.0 5.0 7.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8	24	37	.	16	66 10 12 46	24
	'zəng	32 1 1 205 46	187 187 187	56 40 29 1111	68	38	61	43.1	000 411	12 402
	Alexandria.	122 11 160 198		89 209 18 276	33	131	59 46	36 26 43 43	833 833 833 833	125
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	Section.	nentary:— Diseases of stomach Tuber. peritonitis Dysentery Diarrhea and enter	Liver Other diseases	 nia  sease	ulatory:— Heart Other diseases	ary:— Nephritis Other diseases	sease	ord sease	d:— tism 	: :
	SECT	ary: Pases er. Pe	er di	umor hisis irisy er di	ory: urt er di	nary:— Nephritis Other disc	er dis	in : nal co	stitutional:—Rheumatism Diabetes Senility Debility	sitic:— Pellagra Malaria
		Medical:— Alimentary: Diseases Tuber. pe Dysenter	Liver Other	Respiratory:— Pheumonia Phthisis Pleurisy Other diseases	Circulatory :- Heart Other dis	Urinary:- Neph Other	Blood:— Spleen Other diseases	Nervous:— Brain Spinal cord Other diseases	Constitutional: Rheumatisi Diabetes Senility Debility	Parasitic :— Pellagra Malaria
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524	422 447	$\frac{467}{11,267}$		$1,\dot{657} \\ 910$	. 163	4,807 687 853 596	1,293 1,293 820 93	370 7,504	1,420	1,073	2,613 4,406	239	358	1,708	56,289	11,399
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25	9	40		663	37	316	106	572	10	112	216	2	20	29	3,083	899
28	99	169		57	<b>-</b>	239 77 14		163	29	15	117	11	ಣ	$\infty$	275	223
1	27	333		## 81 61	61.0	151 13 18 6	127	12 205		6.	9 9 10 70	<del>-1</del> 1	9	12	143	162
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- CS	ಣ ಣ	35		49	Н9	199 484 455	30 21 th 37 th 37 th	6229	89	100	138 293	9	12	489	5,021	343
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Ilari Vilari	oning:— Alcohol Other poisons	tics med		stures:— Simple Compound	ours :— Malignant Non-malignar	matic s rzias la in	abse ia orrhe	sal ca . surg	ic	ases	: ilis rrhœ	:	<i>yical</i>	accon.		s unc
H	Poisoning: Alcoho Other 1	Lunatics Other medical diseases	Surgical :-	Fractures:-Simple Compor	Tumours :- Malign Non-n	Traumatic injuries Burns Bilharziasis Fistula in ano	Liver abscess  Hernia  Hæmorrhoids  Appendicitis	Vesical calculus Other surgical diseases	Ophthalmic	Skin Diseases	Venereal:— Syphilis Gonorrhœa	Midwifery	Gynecological diseases	Relatives accompanying p		Operations under general
			Surgi	,				,	Opht	Skin	Vene	Mid	Gynd	Rela		Oper

TABLE XXII.—Analysis of Military Cases (1917).

Hospital.	Numbe Militar tients ad (inclu Prison Wa	y Pa- lmitted ding ers of	Number of Military Cases discharged Fit for Duty (or, if Prisoners of War, to Prisoners of War Camp).		Number of Military Cases discharged to Convalescent Homes, or Camps.		Military Cases discharged to England.		transferred to other Hospitals.		Number of Military Cases which died.		(including Prisoners of War).	
	1916	1917	1916	1917	1916	1917	1916	1917	1916	1917	1916	1917	1916	1917
Alexandria	1,232	111	643	100	370		81	3	43	1	63	4	27,300	1 887
			1,226			29	40	20		1,172	22	23		
Suez Port Said	750		683		9	10	<u></u>	5	41	15	17	52		
Port Said (In.)	82		79	160	_				3	16	_	16	1,447	
Tanta	303	84			21	$_2$	18	_	13			1	5,291	1,131
Damanhûr	330		225	_	31		5		69		_		7,542	_
Mansûra	139		112		24	_	6	_	9	_			3,455	
Zagazig	1,017	124	816	105	28		16	_	131	15	12	4	20,633	
Shibîn el Kôm	57	_	50	_	3	_	_	_	4		_		1,290	
Benha	582	118	469	161	13	1		_ ;	66	4	_		10,644	3,323
Mersa Matrûh	60	_	59		_	_		<del>-</del>	_	_	1	_	797	
Qasr el 'Aini	210	48	166	45	63	_	30	_	33		1	3	3,544	701
Fever Hospital	106	29	55	27	_		_		28		23	2	2,649	594
Beni Suef	395	_	279		14		_	_	101	_	1	·	7,191	
Faiyûm	1,081	7	582	7	118	_	_		360	- 1	6	_	15,500	36
Minya	1,125	56	326	40	415	13	_	_	344	32	11		13,253	1,575
Asyût	1,404	256	742	125				_	571	169	11	2	24,068	4,988
Sohâg	442	32	247	31	3				158	_	2	1	5,799	433
Qena	81	1	18	1	_	—	_	_	54	_	_		1,555	34
Isna	89	1	72	5	13	_	_			_	_		1,116	43
Aswân	26	3	13	2	4	3	_	_	1	7	_		372	259
Total	12,897	4,548	7,142	2,931	2,15,5	57	199	28	2,977	1, <b>4</b> 33	170	108	212,238	67,058

## TABLE XXIII.—Comparative Annual Statistics.

YEAR.	Number of Beds.	Number of In-Patients.	Number of Days of Treatment.	Number of New Out-Patients.	Number of Out-Patients' Visits.	Total Cost of Maintenance.		_	er Bed	Cost per Patient- day.
*						L.E.	м.	L.E.	м.	м.
1908	2,263	31,802	556,543	_	_	_				_
1909	2,491	34,221	598,539	144,509	353,409	<del></del>				
1910	2,385	35,065	579,796	152,733	312,152	_	_	_	_	
1911	2,385	37,018	621,350	173,401	385,062				_	
1912	2,346	38,887	614,921	192,227	424,707	77,992	867	33	245	127
1913	2,409	42,794	627,813	207,882	417,845	83,698	539	34	744	133
1914	2,485	44,914	681,680	179,338	346,673	92,189	050	37	098	135
1915	3,320	50,483	858,878	152,329	340,774	114,843	117	34	591	134
1916	3,825	55,489	946,557	178,788	392,961	123,379	860	32	256	130
1917	3,872	56,289	871,228	209,909	471,742	114,591	683	29	595	131

TABLE XXIV.—LUNATICS.

Total Cases admitted into	1916.	19	- 2 - 22 - 24 - 25 - 25 - 25 - 25 - 25 -	375	
mitted from 17 1918.	Total.	18	10   10   10   10   10   10   10   10	427	375
Total Cases admitted to Hospitals from April 1, 1917 to March 31, 1918.	Fem.	17		113	87
Total to H to M	Males.	16	13   23   23   24   25   27   27   27   27   27   27   27	314	288
rithout n, dumns	Total.	15	a   2   2   2   2   2   2   2   2   3   3	176	171
Total released without Certification, i.e., Total of Columns 4 to 12.	Fem.	14		36	31
Total re Ce i.e., To	Males.	13		140	140
as still lot	Total.	12	c   2   144 84 9 9 2     1   2 8 4 2	116	95
Number released as single Insane but not requiring Asylum Treatment.	Fem.	11		28	14
Number Inst Asylu	Males.	10		88	81
rses.	Total.	6		14	16
Number of Cases released as recovered.	Fem.	8	1	<u> </u>	4
Num	Males.	10	1	13	12
ases ne.	Total.	9		46	09
Number of Cases discharged as not Insane.	Fem.	5		7	13
Num di	Males.	4	1   4   1   11	39	47
fled	Total	က	- 108 108 108 108 108 108 108 108 108	251	204
Number certified and send to Asylums.	Fem.	67		22	56
Num and ser	Males.			174	148
		<u>·                                     </u>		:	•
				:	:
PITALL				Total	916
Hogr				Tc	in
NAME OF HORPI	5		\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		Compare in 1916
Z			tta  tra hûr aid al 'Aini Hospital ( dria Matrûh		Com
			a zin Earlian in a William of end		
. 1			Isna Sobáge Sobáge Dami Asyú Beni Qena Mans Dami Port Miny Shibi Suez Fanta Qalyí Calyí Benh Alexa Aswá Zagax Mersa		

\* Two-thirds of the cases occurring in Alexandria passed through the hospital there.

## 2.—GOVERNMENT DISPENSARIES.

The following tables show the numbers of patients treated gratuitously, and the sums collected in respect of those cases for which a charge was made.

TABLE XXV.—Out-Patients treated gratuitously in Government Dispensaries during 1916 and 1917.

	Number of	f Patients.	Drannyalnya	Number of Patients.			
Dispensaries.	1916	1917	DISPENSARIES.	1916	1917		
Rosetta El 'Atf Ityâi el Bârûd El Dilingât Shubra Khît Baltîm (Burullus) Barrage Fariskûr Tel el Kebîr Kafr el Sheikh Fûa Abu Hummus El Santa Quweisna Shibîn el Qanâtir Matarîa (Menzala) Kafr el Dauwâr El Saft Biba Itsa	852 1,991 2,308 1,096 455 392 131 184 171 297 567 5,334 435 304 999 78 75 108 1,520 442	$\begin{array}{r} 474 \\ 815 \\ 3,466 \\ 1,487 \\ 520 \\ 622 \\ 382 \\ 119 \\ 163 \\ 236 \\ 626 \\ 8,455 \\ 702 \\ 727 \\ 1,072 \\ 62 \\ 79 \\ 412 \\ 670 \\ 368 \\ \end{array}$	Brought forward  Samalût	22,453 934 1,797 1,846 943 2,385 786 425 1,425 1,235 1,033 1,219 312 30 437 70 164 368 165 88 464	26,000 907 397 1,488 263 1,225 304 486 140 1,059 1,071 1,001 382 30 622 11 274 1,001 — 372		
Beni Mazâr  Carried forward	4,714 22,453	26,000	Total	38,579	37,033		

TABLE XXVI.—DISPENSARY RECEIPTS.

Throng A party	Rece	CIPTS.	Drappyg i ping	RECEIPTS.				
Dispensaries.	1916	1917	DISPENSARIES.	1916	1917			
Rosetta El 'Atf Ityâi el Barûd El Dilingât Shubra Khît Baltîm (Burullus) Barrage Fariskûr Tel el Kebîr Kafr el Sheikh Fûa Abu Hummus El Santa Quweisna Shibîn el Qanâtir Matarîa (Menzala) Kafr el Dauwâr El Saff	1916  L.E. M.  13 896 25 325 43 677 19 677 12 465 5 497 5 575 9 371 11 246 7 615 17 78 1 648 21 554 3 670 22 24 22 370 7 728 21 165	14 857 12 353 10 889 19 550 13 413 7 691 11 941 9- 824 14 404 9 223 20 773 2 645 27 435 17 350 19 280 19 891 10 635 25 545	Brought forward  Abu Qurqâs  Wasta  Dairût  Manfalût  Abu Tîg  El Badâri  Tema  Aklımîm  Girga  Baliâna  Bassiûn  Nag' Hammâdi  Qûs  Quseir  Idfu  El Dirr	1916  L.E. M.  346 274  15 610 9 029 7 141 26 140 4 105 18 550 15 220 25 640 10 183 17 870 5 775 11 890 15 062 27 277 11 393 7 849 8 195 3 685	1917  L.E. M.  366 488  15 815 15 552 8 237 25 741 7 950 25 031 16 482 26 555 13 177 22 619 10 343 15 240 18 260 26 432 14 591 5 972 6 718 4 800			
Biba	51 703 5 896 30 376 16 718	38 880 11 806 28 681 19 422	Kharga Oasis Safaga Baharîya Oasis Dakhla Oasis	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 800 0 899 2 889 —			
Carried forward	346 274	366 488	Total	589 555	651 591			

#### 3.—CHILDREN'S DISPENSARIES.

During 1917 all the dispensaries have been open, and a new one at Damanhûr was started in June, which makes thirteen in all now working.

The dispensaries suffered a great loss in the death of Miss Owen at Mansûra. Miss Owen had been in charge of the dispensary since its commencement in 1912. She contracted a severe form of typhoid in March, and succumbed after a very short illness.

## Buildings.

Asyût.—The new house at Asyût is nearing completion and should be finished in May 1918. As the present hired house is in a bad state of repair, the new building is designed to accommodate a school for dayas also.

Faiyûm.—The plan for building for Faiyûm has been postponed, owing to the difficulty in procuring materials etc., during the war. A house, which is shared with the dayas' school, has been rented and is suitable for the work.

## ATTENDANCES.

The total number of attendances at the dispensaries during the whole year was 390,810 in 1916; of these, 70,223 were new, being an increase of 135,728 and 21,300, respectively, on the figures for 1915. But there was a slight decrease in the total number of attendances for 1917 over the figures of 1916—383,707, as compared with 390,810 in 1916, the new cases attending being 69,233, as compared with 70,223 in 1916.

The working days of the dispensaries for the year averaged 293 in 1916 and 295 in 1917 (Mansûra and Damanhûr being excluded in the latter year).

At Asyût, work was suspended for ten days owing to the high Nile flooding the house; and at Port Said the dispensary building was requisitioned at fourteen hours' notice by the Military Authority in order to accommodate a boys' school, so work was also stopped there until a temporary house could be found in which to carry on the work.

## DOCTORS AND TREATMENT OF PATIENTS.

The gratuitous services of the medical men who have helped during the year in visiting the dispensaries are much appreciated; it is difficult to persuade all the cases that need a medical opinion to go to the hospital, as the mothers are afraid of being sent to cordon.

In those towns where the ophthalmic hospital is situated at some distance from the dispensary, the Director, Ophthalmic Hospitals, has arranged for a cart to attend daily, so that children suffering from some other ailment as well as their eyes can be treated at both institutions, and the arrangement is now working satisfactorily at Asyût and Mansûra. At Zagazig the arrangements have not yet been completed.

The opening of the ophthalmic hospital at Faiyûm reduced the numbers attending the dispensary considerably, so one matron was found sufficient for the work. The second matron is now in charge of the dayas' school, which was opened in June, an adjoining house having been taken to accommodate the two institutions.

The high price of bread is influencing the nutrition of the children in most places, both among the town as well as the country cases, and affects the nurslings as well as the older children.

TABLE XXVII.—Patients and Attendances.

DISPENSARY.	New Cases.	Old Cases.	Total Attendances.	Period.
Tanta Zagazig	3,891 4,825 4,704 8,733 2,763 6,115 5,167 4,308 3,167 7,589 6,474 6,474	32,646 16,624 14,253 28,829 30,594 10,092 36,685 26,233 18,323 23,494 21,199 39,480 16,022	38,758 $20,515$ $19,078$ $33,533$ $39,327$ $12,855$ $42,800$ $31,400$ $22,631$ $26,661$ $28,788$ $45,954$ $21,407$	297 days 297 *233 , 298 , 284 , *155 , 293 , 297 , 297 , 303 , 279 , 300 ,
Total	. 69,233	314,474	383,707	Average. 295 days.
Total in 1914	47,601	202,088	294,689	
Total in 1915	. 48,923	206,159	255,082	
Total in 1916	70,223	320,587	390,810	293
Total in 1917	. 69,233	314,474	383,707	295
Increase or decrease	. 990	6,113	7,103	

<sup>\*</sup> These figures being excluded.

TABLE XXVIII.—CLASSIFICATION OF CASES.

	- 0												
Cases.	Tanta.	Zagazig.	Mansûra.	Shibîn.	Port Said.	Damanhûr.	Gîza.	Beni Suef.	Wasta.	Biba.	Minya.	Asyût.	Faiyûm.
Eyes	$ \begin{array}{r} -861 \\ 781 \\ 2,902 \\ 350 \\ 1,157 \\ 61 \end{array} $		$ \begin{array}{r} 651 \\ 603 \\ 2,515 \\ 182 \\ 695 \end{array} $	1,018 $597$ $1,353$ $116$		$ \begin{array}{r} 289 \\ 260 \\ 1,240 \\ 51 \\ 607 \end{array} $	$ \begin{array}{r} 2,240 \\ 301 \\ 681 \end{array} $	57 1,057 1,176 2,465 125 238 49	$\begin{array}{r} 685 \\ 652 \\ 352 \\ 2,266 \\ 81 \\ 262 \\ 10 \end{array}$	771 550 478 1,183 50 127 8	1,795 829 591 2,267 37 2,055 15	1,214 $844$ $1,828$ $149$ $545$	
Total number of new cases  Number of old	6,112	3,891	4,825	4,704	8,733	2,763	6,115	5,167	4,308	3,167	7,589	6,474	
Тотац												39,480 	
Number of working days	297	297	233	298	284	155	293	297	297	297	303	279	300

## 4.—SCHOOLS FOR "DAYAS."

The difficulty of obtaining suitable matrons for the dayas' schools has hampered the work this year, one school having closed in May owing to the matron's resignation on account of marriage, and another in November on account of the matron's ill-health. Efforts are now being made to find candidates in England. One new school was established in Faiyûm in June, making seven in all now working, and has already gained the confidence of the people. Another in Damanhûr is ready to open in the new building, which is being specially adapted for the dispensary and school. The others, which have been working throughout the year, are doing well.

An improvement in the method of selecting candidates has resulted in a better type of pupil entering, and those pupils who have not already taken out their hospital certificates are now examined in the extra subjects at the school examination, but the lack of any authority with powers to deal with the town dayas adds greatly to the difficulty of the matrons' work, and can only be overcome with the passing of a Midwives' Act, as many of these women openly defy the instructions of the Health Office.

#### Buildings.

The building at Asyût of the children's dispensary is being carried on, and it is probable it will be finished in May 1918, when, it is hoped, a dayas' school may be opened there.

#### ATTENDANCES.

The total number of cases attended during the year was 2,373, the proportion of abnormal to normal deliveries being about 9.5 per cent (186 out of 1,956), while the total number of cases in 1916 was 2,197, and the proportion of abnormal to normal deliveries being about 9.4 per cent (176 out of 1,870).

The analysis of abnormal cases shows practically the same class of complication as obtains in Europe, though perhaps transverse presentations are somewhat more frequent.

The total number of visits to patients in their own homes by the matron and pupil dayas was 29,615 in 1917, compared with 28,119 in 1916.

The number of premature and still-births is marked. Maternal mortality among the cases attended stands at one in 314 in 1916 and at one in 158 in 1917, most being cases in which there was long delay before the help of the school was sought.

The number of women seeking advice for gynæcological troubles is very large, but most are sent away, as such work is outside the province of the maternity schools, but the matrons help as many as they are able to.

There is a notable absence of ophthalmia neonatorum among the cases, and practically no tetanus during the time of the *dayas*' visits, though it is probable that cases reported to have died later through inability to suck may have been due to this cause.

The number of in-patients during the year was forty-six in 1917, compared with thirty-one in 1916.

#### Pupils.

One hundred and thirty pupils have been trained and taken their certificates and six have failed to pass the examination in 1916, and 147 pupils have taken their certificates and six have failed to pass the examination in 1917.

#### DOCTORS AND TREATMENT OF PATIENTS.

The assistance given by the doctors of the Government hospitals and also by private practitioners in attending abnormal cases is invaluable, as are also the lectures which are given at some of the schools by the hospital medical officers.

## OLD "DAYAS" AND INSPECTIONS.

It was hoped that two nurses would be appointed, attached to the Public Health Department, who would be employed in inspecting the dayas after leaving the schools, and who would also be available to do emergency locums in case of sickness of any of the matrons, as it is extremely difficult to get suitable locums at short notice, and it is important

that the establishments should not be closed. Some inspections have been carried out in the villages, and the result of these visits only confirms the need for more inspection of the past pupils.

TABLE XXIX.—Number of "Dayas" who passed Examination and those who failed in 1917.

						Passed.	Failed.	Total.
Tanta	• • •	•••	•••	•••	• • •	20	1	21
Zagazig	•••	•••	• • •	• • •		35		35
Mansûra	• • •	• • •	•••	• • •	• • •	18	3	21
Shibîn el	Kô	m	• • •	• • •	• • •	30		30
Fayûm	• • •	•••	• • •	•••	• • •	7	1	8
Minya	•••	• • •	•••	• • •	• • •	19	1	20
Sohâg	• • •	• • •	• • •	• • •	• • •	18		18
		T(	OTAL	• • •	,	147	6	153

Number of 1	Egyptian	midwiv	es w	zho a	attend	led	midy	vifer	y coi	arse	in th	e ma	itern	ity	
homes.	•• •••				• • •	• • •	• • •	•••	•••	• • •		• • •		•••	153
Number of	those who	passed	the	exa	mina	tion	•••		• • •	• • •	• • •	• • •	• • •	•••	147
	49	failed			• • •		• • •								6

### TABLE XXX.—Cases.

Cases.	Tanta.	Zagazig.	Mansûra	Shebîn.	Fayûm.	Minya.	Sohâg.	Total.
Abortions	5	18	31	13	15	11	11	104
Deliveries	124	644	313	231	214	275	155	1,956
B.B.A	2		23	20	79	95	94	313.
Primipara	15	107	83	41	40	49	46	381
Abnormal or complicated	26	35	23	23	27	30	22	186
Premature births	9	37	6	4	8	24	9	97
Still-born	7	20	8	7	3	25	17	87
Mother	2	3	2	1	3	2	2	15
Deaths { Child		13	4		3	7	7	34
In-patients	10	7	8	6	. I	5	9	46
Total number of cases	131	662	367	264	308	381	260	2,373
Total number of visits of matrons and dayas	1,636	7,378	5,001	3,036	3,840	3,854	4,870	29,615
Number of working days	135	342	266	276	208	302	288	
Number of dayas trained	20	35	18	30	7	19	18	147

TABLE XXXI.—"DAYAS'" Schools, 1917—Analysis of Abnormal Cases.

Cases.	Tanta.	Zagazig.	Mansûra.	Shibîn el Kôm.	Faiyûm.	Minya.	Sohâg.	TOTAL.
Multiple Births:—								
Twins	2	9	3	1	3	6	2	26
Triplets $Abnormal\ Presentations:$		1				_		1
Difficult breech Footling	1	14 1	3	<u> </u>	1 1	5	1	25 3
Face	_	1	_		$\frac{1}{2}$		1	4
Transverse	1	$\frac{8}{2}$	4	3 . 2		$\frac{2}{2}$	$\frac{1}{4}$	19 10
Instrumental Deliveries:		_						
Forceps Craniotomy	_		4	1	$-\frac{5}{-}$	4	$\frac{9}{2}$	$\frac{23}{3}$
Complications:— Accidental hæmorrhage		1			1	4	1	7
Post-partum ,,	1	8	1	2		4	$\frac{1}{2}$	18
Placenta previa Adherent placenta	$\frac{1}{3}$	1	1	$\frac{-}{1}$		$\frac{3}{3}$		$\frac{6}{7}$
Prolapse of uterus	_	1	_	_		_	_	1
Rupture of uterus Contracted pelvis	_	1 _	_		<u> </u>	$\frac{}{3}$	3	$\frac{1}{7}$
Hydramnios	_	<u> </u>	1	_	$\begin{bmatrix} 3 \\ 1 \end{bmatrix}$	1 1	$\frac{3}{1}$	$\frac{8}{4}$
Uterine inertia Rupture of perineum	_	<u> </u>	_	_		1		1
Hydatiform mole	_		_	_	2-	_	<u> </u>	$rac{2}{1}$
Cleft palate and hare lip	_	_			_	1		$\frac{1}{2}$
Anencephaly Hydrocophalus	_	$\frac{-}{1}$		<del>-</del>	1		1 1	$rac{2}{2}$
Monster		$\frac{2}{1}$	_	1	$-\frac{1}{1}$	_	1	$egin{array}{c} 1 \\ 2 \\ 2 \\ 4 \\ 2 \end{array}$
Talipse Diseased cord and placenta	_	1				_	_ ,	1
Eclampsia	_	1	_	. 1		_	_	2
Viable	9	33	6	4	6	24	7	89
Non-viable	5	18	29	13	15	11	11	102
Puerperal fever	2	<del></del>	1		$\frac{}{2}$		—	$egin{array}{ccc} 3 \ 2 \end{array}$
Sapraemia Fever typhoid	_	1	_	_		_	_	1
" typhus " relapsing	_			1	$\frac{}{1}$	_	_	1. 1
,, plithisis		_	_		1	—	_	
Dysentery Diarrhœa	_	$\frac{1}{2}$	_	_	1 _	_		$\begin{array}{c}1\\2\\2\\3\end{array}$
Pneumonia	2	_	_				1	$\frac{3}{1}$
Bronchitis Heart disease	_	_	1	1	1	_	1	4
Umbilical hernia Albuminuria	<u> </u>		1				_	1 1
Ovaritis	1	_	_	_			_	Ī
Salpingitis Fistula vag. ves. following lab	_	_	_	1	_		$\frac{-}{1}$	1
Labial abscess	_		_	— ,	_	-	1 1	1
Mammary abscess Mania	_	_			_	_	1	1
Maternal Deaths:— Rupture of uterus		1				_	-	1
Placenta previa	_	_	;	_	_	1	_	1 1
Post-partum hæmorrhage Ante-partum hæmorrhage	_			_	1	-	_	1
(Hydt. Mole)	_				1	_		1 1
Eclampsia Puerperal fever	$\frac{-}{1}$	$\frac{1}{-}$	1	_	_	_	_	$\frac{1}{2}$
Mania	_ 1	_	_	_		_	1	1
Heart disease	_	_	1	1	1	_	_	3
Dysentery Typhus, debility following	_	1	$-\frac{1}{1}$	_		_	_	1 1
Infant Mortality:—	7	9()	6	7	5	25	1.4	84
Born dead Died after birth	$-\frac{7}{-}$	$\begin{array}{c c} 20 \\ 13 \end{array}$	$\begin{bmatrix} 0 \\ 4 \end{bmatrix}$	_	5 5	8	14 7	37
Total	38	146	68	41	63	110	80	546

## III.—REPORT ON SECTION III.

## OPHTHALMIC HOSPITALS, 1917.

These hospitals forming the subject of a separate annual report, the outlines only of the work done by them will be given here.

Statistics.—The number of out-patients treated at the various hospitals was 81,529; the total number of out-patient attendances was 903,751; the average number of visits of each patient was 12.08; the number of operations performed was 59,581; the number of in-patients was 2,847, to whom 65,384 diets were issued.

Government Permanent Hospitals.—The number of permanent hospitals is now ten. The provinces still unprovided with hospitals are Qalyûbîya, Qena and Aswân. A third travelling ophthalmic hospital will be established in 1918 at Giza province.

Provincial Council Permanent Hospitals.—Three permanent hospitals are maintained by the Provincial Council, Gharbîya, at Mahalla el Kubra, Kafr el Zaîyât, and Santa.

Government Travelling Hospitals.—The two hospitals originally endowed by Sir Ernest Cassel carried on work at Qena, Kafr el Dauwâr, Benha, Giza, Rosetta, and Fuwa.

Provincial Council Travelling Hospitals.—The Provincial Councils of Asyût and Daqahlîya each maintains a travelling hospital.

School Inspection and Treatment.—The school ophthalmic clinics at ten of the provincial primary schools have been carried on during the year satisfactorily.

TABLE XXXII.-Sources of Provision and Maintenance of Hospitals.

e			Provided by	MAINTAINED BY	DATE OPENED.
Permanent :-					
Tanta	•••	•••	Government grant	. Government grant	1908
Asyût	•••	•••	Public subscription and Government grant		1911
Mansûra	• • •		Gift by Badrawi Pasha	,, ,,	1912
Beni Suef	• • •	• • •	Public subscription	. ,, ,,	1912
Zagazig	• • •	•••	Provincial Council	. ,, ,,	1913
Mahalla el Kubra	•••	• • •	,, ,,	. Provincial Council	1913
Kafr el Zaîyât	•••	•••	,, ,, ,,	. ,, ,,	1913
Damanhûr		•••	,, ,,	. Government grant	1914
Shibîn el Kôm	•••	٠	Public subscription	. ,, ,,	1914
Sohâg ·	• • •	• • •	,, ,,	,, ,, ,,	1914
Minya	•••	•••	Provincial Council	,, ,, ,,	1915
Santa	• • •	•••	,, ,, ,,	. Provincial Council	1915
Faiyûm	•••	• • •	, ,, ,, ,, ,,,	Government grant	1916
Travelling:					
No. 1 Camp		• • •	Sir Ernest Cassel	Sir Ernest Cassel	1904
$,$ $,$ $2$ $,$ $\dots$ $\dots$	• • •	• • •	,, ,, ,,	,, ,,	1905
Asyût	• • •	• • •	Provincial Council		1912
Daqahlîya	•••	• • •	" "		1913

TABLE XXXIII.—PERMANENT AND TRAVELLING OPHTHALMIC HOSPITALS.

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917
Hospitals in existence:—														
Travelling	H	Ċ1	গে	<b>c1</b>	ભ	<b>ा</b>	ଚୀ	ಣ	4	,C	<del>-1</del> 1		4	4
Permanent	1	1	1	1	H	—	H	ा	4	t~	10	11	13	13
New patients treated	2,954	4,210	7,327	7,446	7,794	12,092	14,342	20,488	28,029	40,670	50,126	52,752	68,304	81,529
Total attendance of out-patients	15,039	50,680	94,204	146,830	132,278	177,761	190,247	236,411	341,211	544,267	686,012	735,919	849,366	903,751
Operations performed	1,282	2,480	5,846	6,794	6,426	9,930	11,486	14,322	21,315	30,648	40,710	42,146	54,205	59,581
In-patients	49	140	202	184	208	390	443	829	606	1,807	2,071	2,274	2,454	2,847
Details:—														
Patients examined	•	:		:	19,614	22,373	25,514	31,274	43,668	62,233	75,398	71,930	94,447	100,410
Patients regularly treated	:	:	:	:	7,794	12,092	14,342	20,488	28,029	40,670	50,126	52,752	68,304	81,529
Incurable cases	:	:	•	:	4,550	2,305	1,776	2,620	7,200	9,544	10,554	7,765	9,871	9,675
Blind in one eye	:	:	:	:	1,189	2,116	2,438	3,196	4,115	5,360	6,425	5,637	7,042	9,385
Blind in both eyes	:	. :	:		852	1,385	3,010	2,811	2,824	3,878	3,591	2,995	3,504	4,611
Trichiasis cases examined	:		:		8,159	10,060	7,507	7,871	13,176	17,329	21,624	19,220	22,214	27,341
", operated on a	on and cured	:			2,262	3,128	2,022	3,933	6,942	11,700	16,542	19,149	26,094	30,200
New patients treated per age :														
Under 1 year	:	•	•		247	516	457	761	1,495	2,700	2,472	3,023	4,031	5,168
From 1 to 5 years	:	•	:		585	1,645	1,497	1,903	3,317	4,631	6,394	5,762	7,865	7,938
., 6 ,, 10 ,,	:	•	•	:	905	1,442	4,469	2,101	3,210	4,786	5,634	5,229	6,985	9,217
,, 11,, 15,,	:	•	•		678	1,294	1,475	2,051	3,056	3,799	4,570	5,651	6,275	7,965
,, 16, 20,,	•	•		•	829	1,156	1,499	2,067	2,588	3,253	3,949	4,491	5,752	6,748
., 21, 40 ,,	•	:		•	2,584	3,775	4,845	6,116	8,167	12,679	17,257	18,492	23,017	28,028
" 41 and over	•	•	•	:	1,798	2,206	3,100	5,589	6,196	8,822	9,850	10,104	14,379	16,465
	•													

## IV.—REPORT ON SECTION IV.

## 1.—INFECTIOUS DISEASES.

The chief features to be remarked in connection with infectious diseases in 1917 are:

- (i) A considerable increase in the case incidence of relapsing fever as compared with the normal.
- (ii) An increase in the case incidence of typhus fever as compared with the normal.
- (iii) A decrease in the case incidence of plague as compared with 1916.

#### RELAPSING FEVER.

The number of relapsing fever cases which occurred in 1917 is the largest so far recorded in this country.

The following table shows the number of relapsing fever cases and deaths reported during the last five years:—

	Υ	EAR.			Cases.	Deaths.	Percentage Death Rate.
1913	•••	• • •	• • •		342	45	13.4
1914 1915	• • •	•••	• • •	•••	$\begin{bmatrix} 218 \\ 761 \end{bmatrix}$	$\frac{28}{72}$	$\frac{12.8}{9.4}$
1946	• • •		•••		10,494	826	7.8
1947					11,162	1,043	9.3

#### TYPHUS FEVER.

Although the number of typhus fever cases recorded during 1917 is much above the average the total is some 12,000 less than that reached in the previous year.

The following table shows the number of typhus cases and deaths reported during the last five years:—

	Y	EAR.		 Cases.	Deaths.	Percentage Death Rate.
1913	•••	•••	• • •	 4,936	1,438	28.9
914				 9,508	2,533	26.6
915				 17,096	4,216	25.2
916				 30,507	7,096	23.2
917				 18,569	4,174	22.4

The continuous drop in the death-rate, as stated in the report of last year, is probably due to better reporting of the disease.

An attempt was made in dealing with this disease in the villages to test the relative value of measures (a) based on the theory that the disease is conveyed by the louse, and (b) on the theory that the disease is produced by inhalation of infected material.

, The measures adopted, based on the louse-infection theory, were:

- (i) Immediate isolation of the cases.
- (ii) Steam disinfection of clothes worn by contacts. Bathing of bodies of contacts where possible.
- (iii) Steam disinfection of everything in the houses of patients or contacts likely to harbour lice.
- (iv) Daily observation of the people living in the house of the case.
- (v) General disinfection of the clothes of the villagers, without reference to contact, where the disease was widespread.

The measures employed under (b), inhalation theory, were:—

- (a) Isolation of the cases.
- (b) Complete and careful daily observation of all contacts.
- (c) No disinfection whatever of contacts or houses.

These two sets of measures were applied so as to exclude variation of result caused by extraneous circumstances, such as the variation in climate, habits of the people, etc.

Measures based on the theory of louse infection gave considerably better results. They have since been applied to all mudîrîyas.

## STEAM DISINFECTION.

A considerable extension of steam disinfection has been effected by the use of portable galvanized iron drums, made on the principle of an autoclave. On several occasions, in severely infected villages, general disinfection of the clothes of villagers has been accomplished with the necessary rapidity by connecting up the engines of steam flour mills with wooden barrels, in which the clothing was placed.

#### PLAGUE.

The total number of declared cases of plague in 1917 was 732, as compared with 1,702 in 1916. The number of deaths was 399, showing a mortality of 54.5 per cent, compared with 828 in 1916, or 48.7 per cent in 1916.

Outbreak at Suez.—Of these 732 cases, 318 occurred in Suez.

The last outbreak of plague in Suez occurred in 1907. Since that year Suez remained free from plague. The first case in 1917 in the town was detected on May 5, and the outbreak lasted till July. In April, twenty-one cases had occurred amongst troops and Egyptian labourers camping further north on the Canal.

There was a severe epidemic among the rats.

The outbreak was of a virulent nature. Three hundred and eighteen cases occurred, and 58·1 per cent died. The majority were bubonic in type, but fifty-one septicæmic cases were notified, and eighteen cases of secondary pneumonic infection. Among the contacts of the latter, only two cases of primary pneumonic plague occurred.

Since the commencement of the war Suez has been overcrowded in its poorer quarters by casual labourers imported from all parts of the country for the additional work produced by war conditions. This overcrowding materially increased the number of cases.

## PNEUMONIC PLAGUE.

Out of a total of 732 cases which occurred in 1917, 608 were of the bubonic type, 65 of the septicæmic, and 59 of the pneumonic.

TABLE XXXIV.—Number of Cases and Deaths from Plague in 1917.

Town	or D	istrict	 	Province.		Cases.	Deaths.
Cairo Alexandria Port Said Suez Ismailia Kantara Qalyûb El Saff Faiyûm Sinnûris Itsa El Wâsta Beni Suef Abu Qurqâs Maghâgha Minya Samâlût Badâri Abu Tîg Asyût Mallawi Ahmîm Tahta Dishna				Governorate  "" Canal Governorate  "" Canal Governorate  Qalyûbîya Gîza Faiyûm  Beni Suef  Minya  "" Asyût  Girga  Qena	n.	2 17 40 318 1 1 6 1 60 40 48 1 1 43 1 43 1 7 27 1 14 41 54	
				TOTAL	• • •	732	399

TABLE XXXV.—RECAPITULATION OF PLAGUE STATISTICS, 1899-1917.

	YEAR	•		Cases.	Deaths.	Deaths per Cent.
1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914				93 127 205 481 303 854 266 631 1,253 1,511 513 1,238 1,656 884 654 219	45 60° 102 291 160 501 181 475 914 780 207 615 1,041 441 304 111	48.0 47.2 49.5 60.0 52.7 58.6 68.0 75.2 72.9 .51.6 40.5 49.7 62.9 49.9 46.5 50.7
1914 1915 1916 1917	• • •	•••	• • •	$\begin{array}{c} 219\\ 235\\ 1,702\\ 732 \end{array}$	111 120 828 399	51.0 48.7 54.5

## MALARIA.

The movement of troops and native levies caused by the war has involved the introduction into all parts of Egypt of a considerable mass of malaria infection.

It was decided in the early part of the summer that energetic steps must therefore

be taken to prevent the spread of the disease.

A committee composed of members of all Government Administrations interested in the question was therefore formed. The Ministries and Departments represented in the committee were the Ministries of Finance, Interior, Agriculture and Public Works (the latter Ministry having a representative both of the Irrigation and Drainage Departments), and the Department of Public Health.

An Army representative was also appointed.

This committee appointed the following sub-committees to study and report on the various questions involved:—

- (i) A sub-committee for Cairo and Cairo district.
- " the principal mudîrîya towns. (ii)
- " rural districts. (iii)
- ,, the oases. (iv)
- ,, for legal questions, i.e. the drafting of a Mosquito Law.

A sum of money was granted for drainage experiments urgently required in Cairo district, and those were undertaken.

Full reports of this and the work of the other sub-committees will be published separately at a later date.

## Malaria Cases.

The following table shows the number of cases of the disease which have come under the notice of the Administration during the year 1917.

LOCALITY.	Cases.	LOCALITY.	Cases
Cairo Alexandria Ismailia Port Said Damietta Suez Beheira Daqahlîya Gharbîya Minûfîya  Carried forward	26 10 11 9 151 4 2 24 23	Brought forward Qalyûbîya Sharqîya Asyût Aswân Benî Suef El Fayûm El Gîza Girga El Minya Qena Total	284 56 69 24 5 11 8 3 1 18 —

#### CHOLERA.

Cholera Cases.—On June 27, 1917, the s.s. "Maryland" arrived at Port Said from Aden. This ship had Indian coolies on board with cholera, who were disembarked in Aden. Eight of her passengers disembarked at Port Said, and they were immediately put under isolation in the fever hospital. Specimens from their stools were examined bacteriologically, and one of them was found to be excreting vibrios suspicious of cholera.

Sinai.—In December 1917, two cholera cases occurred in Sinai, one in a native woman in Belah village, and the other at El Arish, in the person of a Camel Tsansport Corps labourer who had been evacuated from Ramleh district.

Cases in the Interior.—In December 1917, three cholera cases occurred amongst labourers returning from military employment:—

- (i) An Egyptian Labour Corps labourer who had been discharged from Kantara on December 17, 1917, after debility following on fever of unknown origin. He died in his village, Tell Beni Tamîm, Shibîn el Qanâtir Markaz, two days after his return.
- (ii) An E.L.C. labourer who arrived from Kantara to Imbâba on December 25, 1917. He was put under observation under the control system, and died on December 12, 1917. He had been working in Palestine before his return to Kantara.
- (iii) An A.S.C. sais who had been working for three months in Kantara. He arrived at Cairo on December 29, 1917, and was found in a street in Sayeda Zenab quarter, and was consequently removed to the Abbassia fever hospital.

In addition to the three above cases, two other cases occurred amongst Turkish prisoners of war recently brought into Egypt. The first was detected on November 27, 1917, and the second on November 30, 1917.

The system of notification and observation of labourers discharged from service with the Army east of the Canal, alluded to in last year's report, was continued and developed. By this agency cases Nos. (i) and (ii), described above, were detected and the necessary measures taken in time.

In view of the constant menace of cholera infection to which the country was exposed during the year under review, it was thought necessary to obtain additional legal powers of dealing with the disease. A new law (No. 10, dated June 26, 1917) was therefore passed. The powers granted under this law give much more summary powers than previously existed of protecting water supplies, dealing with defects in mosques, public kitchens, cafés, aerated water factories, etc.

#### SMALL-POX.

The number of cases recorded is the lowest during the last nine years. The death-rate is the same as in 1916.

The following table shows the number of cases and deaths recorded during the last five years:—

	Y	EAR.			Cases.	Deaths.	Death rate per cent of Cases.
1913		•••		• • •	2,934	706	24
1914	•••	•••	•••	•••	7,097	1,564	22
1915	•••	•••	• • •	•••	5,222	1,262	24.1
1916	• • •	•••	•••	•••	2,972	802	26
1917	•••	•••	•••	•••	1,567	409	26

The usual detailed statistical tables are appended.

TABLE XXXVI.—Notifiable Infectious Diseases.

# 1917.

CHOLERA.	Deaths.				
Сно	Cases.		61		1
GITIS.	Deaths.	11   4 6   -	38		-
CEREBRO-SPINAL MENINGITIS.	Cases.	20 111 13 1 13	20		2
FEVER.	Deaths.	9 1	86		.1
SCARLET FEVER.	Cases.	315 70 70 5	393		4
	Deaths.	1955   1955	229		1
PLAGUE.	Cases.	2 17 41 318	379		
ING.	Deaths.	15 6 6 728 728	092	931 8 13 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	23
RELAPSING.	Cases.	258 119 27 78 127 8,156	8,742	67 10 10 115 115 115 120 120 120 120 120 120 120 120 120 120	323
us.	Deaths.	382 981 34 14 255 3	1,704	251 259 509 334 500 500 500 500 500 500 500 500 500 50	395
Тхрнив.	Cases. 1	822 3,466 140 21 115 - 588	5,155	257 141 637 8390 173 301 297 297 327 416 429 416 488 347 226	2,433
ID.	Deaths.	853 822 827 81 18	653		9
TYPHOID.	Cases.	1,257 829 5 61 63 863 7	2,242		25
ERIA.	Deaths.	855 155 165 165 165 165 165 165 165 165 1	400	9	6
DIPHTHERIA.	Cases. I	930 112 10 14 10 10 114	-   211,1	12   3   2   3   1   2   3   1   3   3	34
ES.	Deaths.	461 36 1 1 17	515	444 69 127 127 127 127 129 120 120 120 120 120 120 120 120 120 120	475
MEASLES.	Cases. 1	1,060 175 175 164 164	1,408	673 95 95 150 150 153 230 128 128 128 120 150 150	755
ox.	Deaths.		39	10 10 98   11 1	69
SMALLPOX,	Cases. I	71 135 135	272	23.32 64.0 1.22 1.32 1.32 1.32 1.33	326
	1		:		
	RICT.	::::::::	:		:
ATES.	Province and District.	va va	:	ince:— iikh Kubra yât Total	Total
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	Pro	Cairo Alexandria Damietta Port Said Suez Ismailia El Arish Frontier Districts		Gharbíya Province:  Tanta  Kafr el Sheikh Mahalla el Kubra Shirbín  Kafr el Zaiyât Disûq Santa Talkha Fuwa Zifta  Burullus  Daqahlíya Province: Mansûra Simbillâwein Mît Ghamr Dikirnis Aga Aga Fâriskûr	
		Cairo Alexa Dami Port Suez Ismai El An Front		$D_{\alpha}$	

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Beheira Province:-	Damanhûr Shubra Khît Ityâi el Barûd Rashîd Kôm Hamâda Abu Hummus Dilingât Kafr el Dauwâr	Total	Sharqîya Province:— Zagazig Minyet el Qamh Bilbeis Hihya Kafr Saqr Faqûs	TOTAL	Minifiya Province:— Shibin el Kôm Minûf Tala Quweisna Ashmûn	TOTAL	Gîza Provínce:— Gîza Imbâba El 'Aiyât El Saff	Total
Beh	<b>НОГИНЧЕН</b>		Sha		Min		Gize I	

11111

Deaths. CHOLERA. Cases. CEREBRO-SPINAL MENINGITIS. Deaths. <u>01</u> 3 Cases. 111 SCARLET FEVER. Deaths. ೧ 3 Cases. 2222 <u>891</u> 20 22 Deaths. PLAGUE. 60 48 40 148 9 9 07 4500 51 Cases. 29 10 <u>01</u> 07 10 co --30 Deaths. RELAPSING. 98 112 8294210 38 299 341 28 24 Cases. 22498 09 ಬ್ಬಾ 30 တတ <u>п</u>понп Deaths. 17 21 TYPHUS. 46 115 375 47 50 3 114 33 43 185 222 100 E San E SE Cases. 3 70 20 9 9 ಣ Deaths. TYPHOID. 16 17 18 20 10 H 7 ಉ Cases. 15 6 10 34 10 Deaths. 生123 31 DIPHTHERIA. 48 24 6 12 42 22 7000 22 Cases. 21 2004 146 32 1 221 3 014 30 257 37 Deaths. MEASLES. 126 126 126 20 452 44823 40 119 57 116 250 250 38 250 38 28 28 84 Cases. 14 Deaths. SMALLPOX. 55 49 Cases. : : : TOTAL ... **:** : : : : : : : : :: Benha Shibîn el Qanâter ... Tûkh... Qalyûb ... TOTAL ... TOTAL ... TOTAL ... PROVINCE AND DISTRICT. : Qalyúbiya Province :— Faiyûm ... ... Itsa ... ... Sinnûris ... ... Beni Suef Province:-Faiyûm Province:— Minya Province :-Beni Suef Biba ... Minya Abu Qurqâs Samalût ... Beni Mazâr Maghâgha Fashn ... Wasta

TABLE XXXVI.—Notifiable Infectious Diseases (continued).

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o₁	<b>ા</b>				1		1	44
	63							59
111111								58
111111		1111						407
15	23	1 1	14	36	36		1	399
2	36	- 14 14 14	55	40	54			732
	63			68.23	88	16	8	1,043
13 80102	98	9.73	. 17	126 305 29 29 21 21 21	517	79	118	11,162
64 62 1 1 2 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	272	10 13 18 16 4	121	623 - 47 - 17	136	229	71	4,174 1
133 194 194 164 352	1,192	246 422 121 133	596	195 158 71 43°.	475	247.	453	18,569
81   1   1   1	24	16   1	17		4	3	4	7561
38	57	25	27	0.00	17	9		2,549
H	28	m 9 m 10 H	18	10111	19			627
61	41	111 8 4 7 11	41	16889	30		က	1,535
62 62 16	144	75   9	109	100 100 253 30 100	245	131	136	3,643
127 12 76 39 — 3	258	76 13 - 25	114	46 23 101 104 72 16	362	232	242	7,416
94917 470477 E	198	277   6	37	41 8	13	111		409
040 103 103 103 103 103	433	<u> </u>	109	101 100 - 32	71			1,567
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Asyût Province:  Asyût Mallâwi Dairût Manfalût Abu Tîg Badâri Abnûb		Girga Province: Sohâg Tahta Akhmîm Girga Balyana		Qena Province:— Qena Isna Luxor Qûs Dishna Nag' Hammâdi		Aswân Province: Aswân Idfu Dirr		Ü
Asy I		Girs T				Asu I I		

The following diseases were also recorded in 1917:—

	Disease.										
	• • •	• • •	•••	•••			396	6			
Malaria	• • •	• • •			• • •	• • •	479	103			
Parotitis		• • •			• • •		360	23			
Whooping coug	$^{\mathrm{ch}}$		• • •		• • •		<b>4</b> 09	76			
Anthrax			• • •	• • •			26	21			
T							• 23	22			
TO 43'4 0		• • •		• • •			2	2			
	•••		• • •				23	2			

## 2.—PILGRIMAGE.

Owing to the war and the difficulty of providing ships for pilgrims, the Ministry of Interior issued Circular No. 20, dated June 27, 1917, in which it was laid down that the Government had only provided ships for 1,000 pilgrims, and that applications to make the pilgrimage should be submitted before July 21, 1917, and that such applications would be accepted according to the order in which they were submitted.

Two hundred and eighty-one pilgrims left for the Hedjaz, in addition to the Mahmal

escort, which amounted to 582 persons.

They embarked at Suez for Jedda on September 12, 1917, on board s.s. "Neguileh." The Mahmal and its escort were embarked on one of His Majesty's cruisers.

All pilgrims were vaccinated against cholera by the medical officer of the Mahmal. No visit was made to Medina, owing to the fact that it was still in Turkish hands.

The health of all pilgrims was good. On arrival at Suez, only four were found sick and admitted to Suez hospital. The result of the further observation was satisfactory, as all pilgrims except one were traced and observed.

#### 3.—" MULEDS."

In 1917 the Department gave its opinion regarding the holding of thirty-seven mûleds, the period of celebration of which varied from three to fifteen days each.

No other *mûleds* were celebrated, owing to the circular of the Ministry of Interior, dated August 27, 1914.

#### 4.—BARBERS.

- (a) Specially trained in First Aid.—No barbers were trained in First Aid in 1917, and no first aid chests were issued.
  - (b) Six hundred and seventy barbers were given sanitary permits during the year.

## 5.—PASSENGER AND IMIGRANT CONTROL.

The monthly number of ships arriving at Damietta was as follows: April—1, June—1, July--1, August—2, September—7, October—7: total 19. All these ships arrived from Cyprus. They had 112 sailors on board.

TABLE XXXVII.—Statistics of Passengers who landed at Port Said from Ships coming from Cholera-infected Countries during the year 1917.

		Opr	NIN A DV	Passengi			TRANSIT PASSENGERS.						
	let o	nd 2nd (		1				and 2nd (			3rd Class and Deck.		
	Found.	Not found.	Percentage of found.	Found.	Found.  Not found.  Percentage of found.		Found.	Not found.	Percentage   of found.	Found.	Not found.	Percentage of found.	
Cairo	22	2	92	49	7	87	_	· —	_				
Alexandria	25	1	96	258	70	79	—				_	_	
Interior	11	_	100	113	3	97					_		
Port Said	67	_	100	606		100		_	_	1		100	
Total	125	3	98	1,026	80	93	_			1	_	100	

TABLE XXXVIII.—Statistics of Passengers who landed at Alexandria in 1917 from Ships coming from Cholera-infected Countries.

			Percentage found,	1%	66	96	100	100		100	100	100	100	100	100	100	66
		Class.	.bnuot toW		_	ж #	1	1	1	1	1	-			1		35
	Total.	3rd	Found.		197	885	H	$\frac{1}{\infty}$	1	8:1	12	913	191	47	4,663	1,871	9,175
	T	Class.	Percentage found.	%	100	100		100	-	100			100	100	100	100	100
		1 2nd	Not found.							1	.		1	1	-	1	
Transity   Transity			7.0	SO.	34	t-	65										
	TS.	nd 3rd	Percentage found.	%	1	1				1	.	1	1	1	1		1
	RANSI	2nd ar Class	Not found.		1	1	1	-	-		1	1			1		
	T	1st,	Found.		1		1	1		1			1	1	-	-	
	AT	SS.	Percentage found.	1%	100	16	100	100		100	100	100	100	100	100	100	66
	NED A	3rd Class.	Not found.			17		١		1	1		1	ı	١		17
	ASSENGERS REMAINED ALEXANDRIA.	3r	Found.		IG.	275	_	18	1	99	12	730	243	37	4,636	1,862	7,931
	GERS	2nd Class.	Percentage found.	%	100	100	1	100	1	100	1	1	100	100	100	100	001
	ASSEN		.bnuot toV					-		-	-	-	-	1			
	P	1st and	Secondage   Seco		ಣ	9	25	ಣ	# #								
		πô	Percentage band,	1%	66	26	1	1	ı	100	1	100	100	100	001	I	86
	TERIOR	d Class.	Not found.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					1	I	16						
	PASSENGERS FOR INTERIOR.  1d 2nd Class.  3rd Class	33	.bano4		139	909	ı	1			1	202	114	01	10	1	1,082
	NGERS	Class.	Percentage found.	1%	100	1	1	1	1	1	1	1	100	100	100	1	100
	ASSE	l 2nd	.banot to V			1	1		1	-	-				-		
	-	1st and 2nd Class.	Found.		1	1	1	1	1	I	1	1	1	2	2	1	9
		*	Percentage found.	39	100	29	I			100	I	1(0	100	1	100	100	66
	CAIRO,	3rd Class.	Not found.			23	1	I	-	l	1	I	ı	1	I	1	2
	S FOR	ES .	Found.		1	-	1	1	1	_	1	11	110	1	20	0	162
	PASSENGERS FOR CAIRO.	2nd	Percentage found.	%	100	1	ı	1	-			1	100	1	100	100	100
	PAS	1st and 2nd Class.	Not found.			1.		ı		ı	1	1	1	-	-		
		S	.bano4		က			1		1	1		_		2	4	15
					:	:	:	:	:	:	:	:	:	:	:	:	TOTAL
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		rhs.			:	:	:	:	:	:	:	:	:	:	:	:	
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					January	February	March .	April	May	June	July	August	September	October	November	December	
}}																	

Total number of Passengers  $\begin{cases} \text{Found ...} & 9,240 \\ \text{Not found ...} & 35 \end{cases}$  Percentage of

Total (general) ... 9,275\*

Percentage of Passengers Found, 99%

\* Including 34 passengers sent to hospital.

TABLE XXXIX.—Passengers' arriving at Suez, 1917.

* PORT.		Egyptians.	Arabs.	Other Nationalities.	Total.	Not traced.
Jeddah	• • •	107	35	105	247	5
Akaba	• • •	81	21	15	117	11
Waghe		217		13	230	3
Yombou	• • •	7	8	16	31	2
Singapore	• • •	4		· <u> </u>	4	
Basra	•••	35	· <u> </u>	6	41	3
Indian Ports	• • •	25	_	56	81	1
					•	
		476	64	, 211	751	25

In addition to the above, 3,358 passengers arrived at Suez from other ports. Also 76,632 E.L.C. men, returned from Mesopotamia. The latter were put under observation for five days in a special camp at Suez, and any of them found with a history of malaria were subsequently examined and treated for this disease by the medical officers of their places of destination.

## V.—REPORT ON PUBLIC HEALTH LABORATORIES.

## 1.—INTRODUCTION.

Towards the end of 1916 the gradual institution by the Army of separate military laboratories, in connection with the various Army hospitals in the Cairo area, greatly relieved the excessive pressure of work on the Bacteriological Section of the Public Health Laboratories, which, until the Army could make the necessary arrangements, had temporarily undertaken the whole bacteriological diagnosis work of this area. During 1917 this decentralization was completed, and the laboratories attached to the various military hospitals were able to deal with practically the whole of their routine bacteriological diagnosis, special cases only being referred to the Public Health Laboratories.

The chemical work undertaken for the Army, on the other hand, showed a considerable increase. This consisted mainly in chemical analyses of drinking water, foodstuffs, disinfectants, etc. These analyses are, as far as possible, included under the heading of "Military" in the accompanying tables. In addition, the laboratories were constantly referred to by the Army for opinion on various bacteriological and chemical questions.

The total number of specimens examined during the year was 15,111, as compared with 21,397 in 1916, the diminution being due to the great reduction in the bacteriological diagnosis for the Army. Excluding the work done for the Army, the figures show a considerable increase: 13,766 specimens being examined during the year, as compared with 11,895 during 1916.

During the past nine years the figures for the regular work of the laboratories (excluding examinations made for the Army) have been as follows:—

TABLE XL.—Comparative Annual Statistics.

YEAR.	Chemical (including Water and Milk).	Bacteriological (including Water).	Тотац.
4000	404*	0.75	9 290
1909	484*	2,755	3,239
1910	1,225†	5,428	6,653
1911	581	5,193	5,774
1912	797	5,268	6,065
1913	813	6,998	7,811
1914	1,828	9,150	10,978
1915	3,870	8,277	12,147
1916	3,345	8,550	11,895
1917	3,213	10,553	13,766

<sup>\*</sup> Khedivial Laboratory.

It will be seen that there is a steady increase in the amount of work done by the laboratories, and everything appears to point to this rate of increase being continued. Under the present war conditions the provision of further accommodation appears for the moment out of the question, but as soon as circumstances will allow this matter must receive urgent consideration.

In view of the importance of a knowledge of the distribution of malaria and of relapsing fever, the diagnosis of these two diseases is now undertaken by the laboratories for private practitioners free of charge.

<sup>†</sup> Including 718 from Khedivial Laboratory.

The question of food and diets, especially in connection with pellagra, received a considerable amount of attention, and suitable dietaries were drawn out for the different classes of refugees at the Armenian Refugee Camp, Port Said. These dietaries were put in force early in the year, from which time pellagra appears to have gradually disappeared from the camp.

One of the members of the staff attended and gave evidence at a commission held

in connection with the Armenian Refugee Camp.

The question of the preparation of flour in this country and its adulteration was studied, and some of the different types of flour-mills visited. Also some biological tests were attempted in connection with the differentiation of the different flours.

The Laboratories have arranged to take over from the Government Analytical Laboratory the standardization of opium for the Customs Administration, and also the examination

of hashish for the Customs and Coast Guards Administrations.

With regard to the staff, two posts of third-class chemists are temporarily vacant, owing to the occupants (Italian and Greek subjects) having joined their respective armies. The appointment of another second-class bacteriologist has also been postponed until after the war.

Dr. Bain, Director of the Antirabic Institute, was absent throughout the year on active service with the French army, his work being carried out by Père de Vregille, who, previous

to the war, was Director of the Antirabic Institute in Beyrout.

One of the English members of the bacteriological staff unfortunately contracted a laboratory infection of Malta fever, and was in hospital for the latter half of the year. This is the second case of laboratory infection which has occurred in these laboratories, as the former director, some years ago, also contracted Malta fever. Working under the conditions existing in Egypt, and with more or less untrained servants, such accidents cannot always be avoided. Every precaution is taken against such occurrences, and as an additional safeguard the members of the staff have been inoculated both with T.A.B. and cholera vaccines.

Owing to the war conditions great difficulties have been encountered in obtaining scientific apparatus, glass, chemicals, etc., from Europe, but an adequate supply has so far been obtained, and the work of the laboratories has not suffered.

Owing to the steady increase in the work of the laboratories, the present arrangements for the receival and registration of the large number of specimens sent for analysis from Cairo and the provinces, together with the correspondence relating to these specimens, have become inadequate to deal with the work, as much of this is naturally of an urgent nature and necessitates a considerable amount of telephonic communication in addition to the ordinary correspondence. With a view to remedying this, the Central Administration kindly lent the services of the Deputy Director of the Administrative Service, who was asked to report on the most suitable method of dealing with this section of the work. As a result, a satisfactory scheme has been evolved for the reorganization of the clerical work connected with the receival and registration of specimens and the reporting of the results. This will be put into practice as soon as the necessary accommodation is available.

The reorganization of the library has been practically completed, and as a reference scientific library has been taken full advantage of by the members of the staff, as well as by various medical officers of the Army. Reprints have been classified according to subjects and sections. This, together with a card index which has been begun, makes

these reports and reprints more easily accessible for reference.

The reorganization of the stores, in accordance with the instructions laid down by the Stores Department of the Ministry of Finance, has been completed, and a card-index system put into operation which facilitates the working of this section and controls the consumption and stock of the various articles.

Owing to the scarcity of paper some papers and reports written by the members of the staff were held up for publication. These are in the hands of the Government Printing Press, and will be published under the title of "Notes and Reports" as soon as the facilities of the Printing Press will allow. The papers included are:—

1. An Endemic Centre of Filarial Infection in the Neighbourhood of Cairo.

- 2. A Report on the Bacteriological Examination of 1,827 cases of Suspected "Enterica."
- 3. Some Experiments on the Differentiation of Cow and Buffalo Milk.
- 4. Composition of Egyptian Cow Milk.

- 5. Composition of Egyptian Goat Milk.
- 6. On Egyptian Lettuce Oil.
- 7. Notice Historique et Statistique sur l'Institut Antirabique du Caire.
- 8. Conseils Pratiques pour les Analyses d'Eau.

## 2.—BACTERIOLOGICAL SECTION.

The following table gives a list of the examinations made under their several headings. The figures do not include the specimens of water examined bacteriologically, these being given in the report on the Water Section.

TABLE XLI.—BACTERIOLOGICAL WORK DONE.

NATURE OF SPECIMEN.	Government.	Private.	Military.	TOTAL.
Cholera	183		8	191
Plague	364			364
Cerebro-spinal meningitis	12	8	67	87
Diphtheria	172	791	45	1,008
Malaria and relapsing fevers	3,690	33	78	3,801
Malaria fever	391			391
Relapsing fever	486	_		486
Agglutination reaction for enteric	525	241	21	787
" " " Malta fever	44()	33	1	474
Cultural examinations for enteric	14	17	5	36
,, dysentery (and microscopic)	3	6	8	17
Wassermann reaction	913	7	123	1,043
Films for gonorrhea	165	6	418	589
,, for Špirochæta pallida	9	2	46	57
Sputum for tuberculosis	93	13	24	130
Urine for albumin, sugar, or both	3		3	6
" bilharzia ova	30	3	11	44
Anthrax	5			5
Miscellaneous	46	10	27	83
·Grand Total	7,544	1,170	885	9,599

The occurrence of an outbreak of cholera in the area under military occupation east of the Suez Canal, necessitating the institution of stringent measures on the part of the Department for the protection of Egypt, involved a considerable amount of increase in the cholera work.

In view of the importance of the immediate detection of any cases occurring in Egypt, arrangements were made for the reception and examination of specimens arriving at night. Specimens were sent to the laboratories in special ice boxes, a large number of which were kept at numerous centres throughout the country.

In addition to the routine diagnosis, a number of disinfection and other experiments were carried out in connection with cholera prophylaxis, and advice and assistance given to the Epidemic Section in the drawing up of the cholera regulations and on many questions of cholera prophylaxis.

The number of examinations made for Government hospitals and Government services throughout the country shows an increase on last year's figures of 1,532, the increase being mainly under the headings of cholera, malaria, and relapsing fever.

The examinations made for private practitioners show an increase of 224, the increase being mainly under the heading of diphtheria. Owing to the extension of the free list for private examinations, the amount of fees collected was small.

As a result of the re-arrangement of the military work the number of bacteriological examinations made during the year was markedly diminished—885 as against 9,144 last year.

The fitting-out and despatch of cholera-collecting specimen boxes was undertaken by the laboratories and added materially to the work of the storekeeper and his assistant.

As difficulty was experienced in obtaining sufficient cholera vaccine from Europe, six batches of vaccine were made and bottled and sent to cold storage. This made an addition of some 10,000 doses to the reserve stock.

During the spring, advantage was taken of the large number of typhus cases in the Government Infectious Diseases Hospital, and an investigation was begun in connection with this disease. Passage experiments were carried out on guinea-pigs and these

at the end of the year had reached the twenty-fourth passage. In all, some 160 guineapigs have been utilized. This has given opportunities from time to time, as the routine work allowed, of investigations into the nature of the causal organisms by microscopical and cultural methods. Experiments were also carried out in relation to the part played by infected lice in the transmission of the disease. These experiments are being continued.

Opportunity was taken for the preparation of a polyvalent agglutinating paratyphoid A serum, one of the members of the staff having isolated and worked through some 200 different strains. Exhaustion experiments were carried out with a view, if possible, to find some form of classification in these and allied organisms.

Various agglutinating sera were made in connection with different organisms isolated,

especially for many of the vibrios separated from suspected cases of cholera.

An average of twenty Wassermann reactions were carried out each week; this necessitated the making of a regular supply of hæmolytic serum and antigen. The weekly routine examination of specimens from the lunatic asylum for this reaction was continued throughout the year. These constituted about 80 per cent of the total number of the Wassermann reactions made. The results have been found of great value by the Director of the Lunacy Section and add considerably to the value of the reports on the cases, as well as aiding in their classification.

Examinations were made periodically of specimens sent by the Veterinary Section of the Ministry of Interior. These included many interesting conditions occurring in domesticated animals.

The usual diagnosis examinations were made for the Medical Commission and any case of special interest investigated.

The laboratories were constantly in touch with the different Government and military laboratories throughout the country, supplying them with such materials as were available and with standard stock cultures.

Samples of bread and flour were examined and reported on from time to time, both for the Military Authorities and for Government Departments.

Lists of requirements were drawn out for Provincial Government Laboratories, and an arrangement made for standardizing the technique in the laboratories.

At the request of the Arab Bureau a list of the necessary outfit and equipment for the proposed laboratory at Jeddah was prepared, and certain media and materials supplied by the Public Health Laboratories.

The laboratories were regularly consulted by the different Government Departments for advice and reports on various specimens, such as disinfectants, filters, milk, etc. Technical opinion was given from time to time to the Department's Stores Section, especially in connection with contracts.

Some difficulty was experienced in obtaining and maintaining an adequate stock of experimental animals, but arrangements have now been made at Khanka Asylum, Khanka Sewage Farm, and the Government Infectious Diseases Hospital at Abbassia for the breeding of rabbits and guinea-pigs, so that it is hoped this difficulty will be suitably met in the future.

#### 3.—CHEMICAL SECTION.

The following chemical analyses have been performed during 1917:—
TABLE XLII.—CHEMICAL WORK DONE.

	MANZÛL, HALÂWA, ETC.			BUTTER.			Milk.							
SAMPLES RECEIVED FROM	. Water.		cotics or kaloids.		Adulterated.		and		d.	(kind of stated).		etc.	neous.	AL.
		Present.	Absent.	Genuine.	By admixture with other fats and oils.	Containing an excessive mount of water.	Edible Fats	Genuine.		Doubtful (kind milk not stated	Abnormal.	Drugs,	Miscellaneous.	TOTAL
									<u> </u>					
Govt. Administrations General Parquet	104	$\frac{5}{64}$	$\begin{array}{ c c } & 8 \\ 179 \end{array}$	33 19	$\begin{bmatrix} 3 \\ 5 \end{bmatrix}$	6	$\begin{bmatrix} 24 \\ 2 \end{bmatrix}$	1,433	854	14	19	$\begin{vmatrix} 194 \\ 2 \end{vmatrix}$	208	$2,905 \\ 273$
Private persons Military				$\frac{1}{3}$	$\begin{bmatrix} 1\\2 \end{bmatrix}$	2 8		3	11 13	3			$\begin{array}{c c} 1\overline{1} \\ 230 \end{array}$	29 335
GRAND TOTAL	157	69	187	56	11	<b>1</b> 6	36	1,442	878	17	19	203	451	3,542

The miscellaneous analyses in the preceding table are made up as follows:—

TABLE XLIII.—DETAILS OF MISCELLANEOUS CHEMICAL ANALYSES.

NATURE OF SPECIMEN.	Government.	Military.	Parquet.	Private.	Total.
Bread Coffee Flour and grains Fruit, jams Molasses and honey Vinegar Aerated waters, etc. Various foodstuffs and beverages Alum and alumino-ferric. Bleaching powder Sand Stomach and stomach washings	18 8 11	$     \begin{array}{c}                                     $	1     	- - 2 - - - 4 2 - - - 3	4 3 52 8 12 6 143 12 9 166 6 17
Urine	5	1	1	- -	$\frac{6}{7}$
Grand Total	208	230	2	11	451

In addition to the foregoing, the following chemical examinations have been carried out: tinned milk 4; condensed milk 2.

Milk Analyses.—The daily analysis of milk on behalf of the Cairo City Health Inspectorate, has been continued during 1917. A summary of the results (which are included in the table of chemical analyses) is appended.

TABLE XLIV.—MILK ANALYSES.

Description.	Number.	Percentage.		
Genuine Adulterated (skimmed, watered, or both) Skimmed Watered Skimmed and watered Abnormal Doubtful (kind of milk not stated)	1,420 802 248 389 165 16 11	63·9 36·1 11·2 17·5 7·4		

Five samples contained added sugar.

The tables given above include the following investigations:—

- 1. Native Diet.—Quantitative analyses have been made of typical articles of food forming the diet of the population of Egypt. Certain seeds grown in Egypt have been analysed with a view to ascertaining their nutritive values.
- 2. Flour.—A number of consignments of flour have been examined for the British Army and opinions given as to their suitability for making bread.
- 3. Margarine.—Supplies of margarine prepared by local manufacturers have been examined and opinions given with regard to suitability for issue to troops. The locally prepared product now being issued is periodically examined.
- 4. Molasses.—At the request of the Ministry of Agriculture analyses have been performed of a number of samples of 'asal prepared in Upper Egypt and Lower Egypt.
- 5. Bleaching Powder.—In view of the difficulty experienced in keeping this product, experiments have been made on its rate of decomposition in this country. The Epidemic Section of the Department has been advised as to methods of storage and issue.

- 6. Destruction of Fleas.—A suitable emulsion for this purpose has been recommended to the Epidemic Section.
- 7. Sale of Food.—In connection with the drafting of a proposed Food Law by the Central Administration, advice has been given on various technical points.

#### 4.—WATER SECTION.

The number of analyses of water and ice made for all purposes during the year was as follows:—

TABLE XLV.—WATER AND ICE ANALYSES.

Bacteriological.	Number of Samples.	Examined for Total Bacteria.	Examined for Lactose Fermenters.
Cairo:—  Rôd el Farag supply	478 244 324 345 6 35 415 117	$\begin{array}{r} 478 \\ 244 \\ 324 \\ 345 \\ 6 \\ 35 \\ 231 \\ 117 \end{array}$	478 244 324 — 6 35 415 117
Total	1,964	1,780	1,619
Chemical.  Public supplies  Military ,,	230 53		
. Total	157	_	

A regular weekly examination has been made throughout the year of the water of the Rôd el Farag, Gîza, and Me'âdi supplies, and a daily bacteriological examination of the Rôd el Farag supply as delivered in the town.

Bacteriological examinations of the ice supply in Cairo and of samples of aerated waters collected in Cairo have been regularly carried out for the Cairo Health Inspectorate.

The results of these analyses will be included in the report of the Medical Officer of Health for the city.

The analyses of water supplies for the British Army have been continued during 1917 and a complete list compiled, showing the results of some hundreds of analyses of well waters in Egypt and Sinai, together with all available information as to the nature and site of each well.

Preparations for the treatment of water, including bleaching powder, alum, and sterilizing tablets, have been examined and reported upon.

Equipment has been supplied to the Army for the purpose of testing water in the field as regards:—

- (a) Salinity.
- (b) Presence of active chlorine in chlorinated water.
- (c) Presence of poisons in well waters of recently occupied territory.

For various reasons—mainly connected with the European war—it has not yet been possible to develop the Water Service so as to provide an adequate and regular inspection of the public drinking water supplies of the country. It is very desirable that as soon as circumstances allow this matter should receive serious attention. A note on this question—submitted to the Director-General on August 14, 1917—is annexed hereto.

#### NOTE ON THE WATER SERVICE.

## Submitted to the Director-General, Public Health Department.

In the Annual Statistical Report of the Department for 1915 it was stated that: "With a view to the hygienic control of water supplies in Egypt, a special Water Service was formed by the Department early in the year, and was placed in charge of the Director of the Hygienic Institute, with the collaboration of the Chief Engineer of the Municipalities and Local Commissions. It is intended that this Service will undertake the regular inspection of all public water supplies, whether these are in the hands of the Government, Municipalities, companies, or private individuals, and will concern itself with all questions relating to water supplies in Egypt."

For various reasons—mainly connected with the European war—it has not been possible for the Department to develop this Service, so that, as yet, there is no provision for a regular

or adequate inspection of the public drinking water supplies of the country.

It is important that this state of affairs should be frankly recognised, as the fact that the Department has nominally created a "Water Service" for the control of the supplies gives the impression that these supplies are being regularly inspected and adequately controlled.

The present position of the question is as follows:—

Early in 1915 the Department, recognizing the urgent necessity for a regular and adequate control of the public water supplies, and the desirability of a Service which would interest itself especially in the various problems connected with drinking water

supplies in Egypt, decided on the creation of a Water Service.

No special staff for this purpose was at the moment available, but it was arranged that the Director of the Hygienic Institute should be in charge of the Service, with the collaboration, for engineering questions, of the Chief Engineer of the Municipalities and Local Commissions. Bacteriological and chemical analyses—except in the case of Alexandria and the Suez Canal Company's supplies—were to be carried out in the Hygienic Institute, Cairo, where a post of second-class bacteriologist was provided. Under the existing conditions it has been, however, thought advisable to postpone filling this post until after the war; and as it has not been possible to provide any special staff for the purpose of inspection, collection of samples, etc., the inspections have had to be made in person by the Director of the Hygienic Institute and the Chief Engineer of Municipalities, and as the time of these two officials is already fully occupied the Water Service naturally suffers.

Under the present conditions this state of affairs is to some extent perhaps unavoidable, but as soon as circumstances permit every effort should, I think, be made to put this Service on a sound basis.

The provision of safe drinking water supplies is now universally recognized as a fundamental public health measure, and in a country liable to infection with cholera is absolutely vital if the population is to be protected from large outbreaks.

Although a great deal has been already accomplished by the Public Health Department in the provision of water supplies for the larger Egyptian towns, this is only a begin-

ning, and much remains to be done.

The supplies even of Cairo and Alexandria leave much to be desired, and most of the smaller towns in Egypt are as yet unprovided with filtered supplies; the inhabitants taking their water generally from very questionable, if not highly polluted, sources.

Although the Water Service has been in existence for so short a time its influence on the efficiency of many of the supplies is already evident, and a good beginning has been made. All the larger supplies have been visited and are being reported upon. Where necessary, repeated visits have been made and suggestions for the improvement of the existing conditions, or for necessary modifications, drawn up.

All consignments of alum or "alumino-ferric" to be employed for the clarification of water are now examined, both for their content of available aluminium sulphate and for absence of arsenic, and the different sands employed are examined in the laboratories

for their suitability for use in filters.

A regular weekly examination is made of the Rôd el Farag, Gîza, and Me'âdi supplies, and a daily bacteriological examination of the water from the Cairo supply as supplied in town.

A regular bacteriological examination of the ice supplied in Cairo has been instituted, and the very necessary examination of aerated waters on sale both in Cairo and the provinces has been begun, although the available staff is not sufficient to deal with this question on any large scale. The results obtained already, however, show that grossly polluted aerated waters are sold in the country.

During the years 1915 and 1916, since the creation of the Service, a total of 2,850 bacteriological and 716 chemical examinations of water, ice, and mineral waters have been made.

This amount represents the maximum which can be carried out by the present staff. The result of the two years' working has amply justified the existence, and emphasized the need, of a Water Service, and it is to be hoped that, as soon as conditions permit, means will be found for its extension, with a view not only to the control and improvement of existing supplies, but also to the study of the many problems connected with drinking water in Egypt.

August 14, 1917.

(Signed) C. Todd.

## 5.—VACCINE INSTITUTE.

As will be seen from the following figures, the amount of vaccine lymph issued in 1917 was greater than in any of the six preceding years:—

												Doses.
1911	• • •		• • •	• • •		• • •			• • •	• • •		532,836
1912	• • •			• • •		• • •	• • •	• • •		• • •	• • •	576,210
1913	• • •	• • •		• • •	٠	• • •	• • •			•••	• • •	771,361
1914	• • •		• • •	• • •	• • •					• • •		1,025,896
1915	• • •	• • •	• • •	•••	•••	•••		•••	• • •		• • •	961,665
1916		• • •	• • •	• • •	• • •	• • •	• • •	•••	•••	• • •		1,222,600
1917		•••	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	1,558,677

The high figure of 1917 was due chiefly to two reasons:—

1. The decision of the Department to replace arm-to-arm vaccination by calf lymph vaccination throughout Egypt.

2. The vaccination of all Egyptian labourers recruited for the British Army.

The issue during 1917 was made up as follows:—

							Doses.
Public Health Inspectors (Banda	ars)	• • •	• • • •		•••	•••	283,030
", " " (village	es)	• • •	•••	•••	•••	•••	343,303
Extra to Public Health Inspector	rs	•••	• • •	•••	•••	• • •	231,439
Egyptian Army	•••	•••	•••	•••	•••	• • •	46,166
Ministry of Waqfs	•••	• • •	• • •	•••	•••	•••	1,920
Ministry of Education	• • •	•••	••	•••	•••	•••	13,325
Prisons Department	•••	• • •	•••	•••	•••	•••	1,115
Provincial Councils	•••	•••	• • •	•••	•••	:••	2,125
Suez Canal Company	•••	•••	• • •	• • •	•••	• • •	2,590
Alexandria Municipality	•••	•••	• • •	•••	•••	•••	124,300
British Army	•••	•••	•••	•••	•••	•••	310,841
Miscellaneous (gratis)	• • •	•••	•••	• • •	•••	•••	5,047
Sudan Government	•••	•••	•••	•••	•••	• • •	143,635
Miscellaneous sales	•••	•••	• • •	•••	•••	•••	49,841

Total ... 1,558,677

With the exception of the last two issues (Sudan Government and Miscellaneous

sales) all other issues were free of charge.

As vaccination is compulsory under the Egyptian laws and regulations, it is very desirable that every facility should be given to medical men in the way of obtaining an adequate supply of reliable vaccine. The Department is therefore arranging that in future vaccine will be supplied gratis to all registered medical practitioners in Egypt. It has up till now been the practice of pharmacists to keep a stock of vaccine for sale to medical men or to the public. This practice is most undesirable, as the pharmacist usually had no means of keeping the lymph at a suitable temperature, and purchasers of the lymph had no guarantee that the lymph was active. It has therefore been decided that in future no lymph will be issued except to medical men.

In Cairo arrangements have been made by the Medical Officer of Health that supplies of lymph will be kept in each qism, where they can be obtained by any medical man gratis

on written demand.

In this way a free supply of reliable lymph will always be immediately available.

A sudden diminution in the activity of the lymph, without apparent reason, necessitated the destruction of twelve batches, and some difficulty was experienced in obtaining a fully active strain. It is interesting that, whilst the activity for children dropped to a very low point, the lymph remained highly active for the buffalo calves, giving good typical pustules with many secondary pustules.

Fresh seed vaccine, both glycerinated and lanolinated, obtained from England gave

very poor results.

Passage through the rabbit, by Calmette's method, was also unsatisfactory.

A good strain was finally obtained by retro-vaccinations, lymph from typical pustules

in healthy children being chosen for the inoculation of the calves.

The laboratories are much indebted to the Medical Officer of Health for the City of Cairo and to the Medical Officers of the Cairo Qisms—particularly that of Sayeda Zeinab for their help in this matter, and particularly for carrying out careful tests of the activity of the various strains of lymph.

An outbreak of cattle plague and of foot-and-mouth disease amongst the calves necessitated the destruction of one batch of vaccine and the thorough disinfection of the

stables, etc.

Under the conditions obtaining in Egypt, and until proper isolation accommodation can be provided, such occurrences must be regarded as inevitable.

## 6.—SERUM CENTRIFUGING LABORATORY.

Serum bottles having arrived from England, this laboratory was re-opened and worked for some three months in centrifuging and bottling the remaining cattle plague serum, which, for want of bottles, had been stored in cold storage in demijohns. 154,021 doses (50 cc.) of cattle plague serum have been issued on the demand of the Veterinary Service.

The Egyptian serum in stock at the end of the year was 216,765 doses of 50 cc. This, together with 19,548 doses received from India, makes a total in stock at the end of the

year of 236,313 doses of 50 cc.

The question of procuring a further supply of cattle plague serum was referred to the laboratories by the Ministry of Agriculture, and estimates of the cost of re-opening the Serum Institute at Abbassia were prepared. The possibility and cost of procuring

the necessary serum from the Indian Government was also gone into.

Arrangements were also made for handing over, at the beginning of the next financial year, the charge of cattle plague serum and the cold-storage room to the Ministry of Agriculture. As soon as the arrangements are completed it is proposed that the Centrifuging Laboratory be converted into a special kitchen for the preparation of media, etc., the present requirements having outgrown the space at present available.

#### 7.—ANTIRABIC INSTITUTE.

In 1917 a total of 971 persons were treated in the Institute. From this number the following deductions should be made:—

- 5 persons who ceased to attend for treatment without a satisfactory reason;
- 266 persons whose treatment was discontinued as being unnecessary, the observation of the animal for a period of ten days or more having shown it not to be rabid;
  - 56 persons whose treatment, although completed, must be considered useless, the animal inflicting the bite having been proved healthy by inoculation of rabbit.

The statistics therefore comprise 644 patients. This figure is an increase of 48 over the number treated in 1916.

## I.—Monthly Incidence.

The monthly incidence of the 644 cases dealt with in the statistics is shown below:—

							Pe	ersons.								P	ersons.
January		• • •	• • •	• • •	• • •	• • •	• • •	55	July	• • •		• • •					50
February		• • •				•••		50	August	•••	• • •		• • •	• • •	•••	•••	54
March		• • •	• • •					70	September	•••	•••	• • •	• • •	• • •	• • •		52
April	• • •	• • •				• • •	• • •	$5\overline{5}$	October		• • •			•••			64
May	• • •		• • •			• • •		60	November			• • •		• • •	• • •	• • •	37
June					• • •			55	December	• • •	• • •		• • •		• • •		42

## II.—Topographical Distribution.

The 644 persons treated may be subdivided as follows:—

Egyptians	• • • • • • • • • • • • • • • • • • • •	• • •	•••	• • •			 • • •	• • •	• • •	581
Foreigners	resident	in	Egypt	•••	• • •	• • •	 • • •	•••	• • •	58
Foreigners	not resi	dent	t in <b>E</b> gy	pt	• • •		 • • •	• • •	• • •	5

Their place of origin was:—

						I	Persons.			P	ersons
Governorates :—								Provinces (continued):—			
Cairo			• • •		•••		87	Gîza		•••	34
Alexandria		• • •		• • •	• • •		45	Beni Suef	• • •	• • •	4
Suez Canal				• • •	• • •	• • •	8	Faiyûm	• • •	• • •	10
Damietta	• • •		• • •	• • •		• • •	15	Minya	• • •	•••	33
								Asyût	• • •	• • •	14
Provinces:—					,		•	Girga			6
Qalyûbîya	• • •	• • •	• • •	• • •	• • •	• • •	23	Qena		•••	6
Sharqîya						• • •	58	Aswân			4
Daqahlîya		• • •	• • •	• • •	• • •	• • •	120				
Minûfîya	• • •	• • •	• • •	• • •	• • •	• • •	50	Sudan	• • •	• • •	3
Gharbîya	• • •			• • •	• • •		99	Sinai Peninsula		• • •	6
Beheira	• • •	•••		• • •		• • •	17	Abyssinia	• • •	• • •	2

## III.—CLASSIFICATION OF BITING ANIMALS.

The injuries to the 644 patients were inflicted by:—

Dogs			• • •	• • •		• • •	• • •	• • •	• • •	• • •	in	571	cases.
Cats			• • •	• • •	• • •	• • •			• • •	• • •	,,	19	"
Wolves	• • •	• • •	• • •	• • •	• • •	• • •	• • •		• • •	• • •	,,	26	,,
Monkey	s	• • •			• • •	• • •	• • •	• • •	• • •		"	1	"
Donkeys	· · · ·	• • •	•••	•••	• • •	• • •		•••	• • •	•••	22	11	,,
Horses.	• • • •	• • •	• • •		• • •	• • •					,,	6	,,
Camels.		•••	• • •	• • •	• • •			• • •	• • •	•••	22	7	"
Mule													
Rabid h	uman	bein	ıgs	• • •	• • •	• • •	• • •		• • •		"	2	,,

## IV.—Position of the Injuries.

69 cases were bites on the head; 361 cases were bites on naked skin, of which 149 were serious and 212 slight; 214 cases were bites through clothing.

## V.—Notes on the Animals inflicting the Bites.

- 1. It is to be noted that the number of persons bitten does not correspond to the number of animals causing the bites reported by the Veterinary Service, as in several cases one animal caused the injury to more than one person.
- 2. As a result of their observation by the Veterinary Service, 261 animals, having bitten 266 persons, were found to be non-rabid.
- 3. Experimental inoculation of rabbits undertaken at the Institute showed that 44 animals (38 dogs, 4 cats, and 2 wolves), having bitten 24 persons, were healthy.
- 4. In a certain number of cases definite diagnosis could not be established, and these cases are considered as suspect. The details are as follows:—
  - 211 animals escaped and could not be found.
    - 40 animals were killed and the carcases destroyed.
    - 66 brains of animals arrived at the Institute in a state of decomposition and no investigation was possible.
    - 7 animals remained suspect, the rabbit inoculation being inconclusive.

The total of suspected animals is therefore 324.

5. Rabies was considered to be proved in the case of 92 animals, having bitten 219 persons. The diagnosis was determined by:—

Veterinary inspectors in the case of 27 animals (23 dogs, 1 horse, 1 donkey, and

2 cats), having bitten 82 persons;

Rabbit inoculation in the case of 65 animals (60 dogs, 3 cats, 1 wolf, and 1 donkey), having bitten 137 persons.

6. In the case of 9 animals, having bitten 19 persons, positive diagnosis of rabies is presumed by the death of one or more of the persons bitten.

## VI.—METHOD OF TREATMENT.

No change was introduced during the year into the method of preventive vaccination and serotherapy described in the 1916 Report.

## VII.—STATISTICS.

In accordance with the practice in other antirabic institutes, the statistics only comprise deaths occurring more than fifteen days after the treatment was completed.

Amongst the persons treated in 1917 there occurred six deaths. Table I attached gives the names and other particulars concerning each of these cases. The corrected mortality rate, representing the cases in which the treatment failed, is therefore 0.9 per cent.

In addition to the above, it is necessary to record the death of six other persons who died either during treatment or less than fifteen days after its completion. The gross mortality, comprising all deaths, is therefore 1.8 per cent.

Table II gives a classification of the cases treated and the mortality rate.

TABLE XLVI.—Notes on Patients who died in 1917.

Place of Death.	Residence.	<b>*</b>		<b>£</b>	<b>£</b>	
Date of Death.	April 3:— 70 days after the bite. 48 ", treatment.	April 6:— 78 days after the bite. 57 ", " treatment.	May 10:— 40 days after the bite. 18 ", "treatment.	June 3:— 45 days after the bite. 22 " treatment.	July 1:— 41 days after the bite. 19 " treatment.	September 2:— 211 days after the bite. 188 " " treatment.
Dates of Treatment.	Jan. 24 to Feb. 13.	Jan. 18 to Feb. 7.	April 1 to April 21.	April 21 to May 11.	May 22 to June 11.	Feb. 5 to Feb. 25.
Date bitten.	Jan. 22.	Jan. 17.	Mar. 30.	April 19.	May 20.	Feb. 2.
Bitten by	Wolf. Diagnosis suspect.	Dog. Diagnosis positive.	Dog. Diagnosis impossible	Dog. Diagnosis impossible.	Dog. Diagnosis impossible.	Dog. Diagnosis impossible.
Nature and Number.	1 very severe.	2 severe.	1 severe. 2 slight severe. 1 slight.	2 severe.	1 severe. 5 slight.	1 severe. 2 slight. 1 severe. 1 slight severe.
Position of Injuries.	Nose.	Right foot.	Forehead, left eyebrow, nose.	Chin.	Nose.	Head, lower lip, left forearm, chest.
Place where the Accident occurred.	Ezbet el Nuzha, Moharrem Bey, Alexandria.	Bishet Kaid, Hihya district, Sharqîya.	Kattamah, Tanta district, Gharbîya.	Abu Raya, Talkha district, Gharbîya.	Banadf, Minyet el Qamh district, Sharqîya.	Katama el Soghra, Faqús district, Sharqîya.
Sex.	. E	i.	ë	ij	m.	ui.
Age.	45	55	27	ro		12
NAME OF PATIENT.	Ahmed Said	Mohamed Hassan Awaga.	Mohamed Shams el Din.	Sayed Shaaban	Hussein Abdallah	Naasah b. Abdel Megid
Serial Number.	7467	7456	9292	7723	7811	7506

TABLE XLVII.—RESULTS OF ANTIRABIC TREATMENT IN CAIRO DURING 1917.

		URIES E HEAD.	on N	NJURII AKED d <b>e</b> xce <sub>l</sub>	SKIN		NJURII GH CL	ES OTHING.	ŋ	COTAL	5.
	Treated.	Died.  Mortality per Cent.	Treated.	Died.	Mortality per Cent.	Treated.	Died.	Mortality per Cent.	Treated.	Died.	Mortality per Cent.
Class A	17	0 0.0	91	1	0.9	48	0	0.0	156	1	0.6
"B	9	0 0.0	46	0	0.0	27	0	0.0	82	0	0.0
" C	43	5 11.6	224	0	0.0	139	0	0.0	406	5	1.2
	69	5 7.2	361	1	0.2	214	0	0.0	644	6	0.9

Class A.—The animal causing the bite was proved to be rabid by experimental inoculation, or by the development of rabies in patients bitten.

Class B.—The animal causing the bite was declared to be rabid by a veterinary surgeon.

Class C.—The animal causing the bite was suspected of rabies.

## VI.—REPORT ON MEDICAL COMMISSIONS.

## 1.—CENTRAL MEDICAL COMMISSION.

During 1917, 6,773 medical certificates have been issued by the Central Medical Commission, an increase of 1,740 over 1916.

115 employees were invalided on account of bilharziasis and its sequelæ.

The number of certificates issued by the Central Medical Commission during the last five years was as follows:—.

1913	• • •	• • •	• • •	• • •	• • •	• • •		• • •	• • •	• • •	• • •	•••	3,013
1914	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	•••	•••	•••	3,776
1915	•••	•••	•••	•••	•••	•••	• • •	•••	•••	•••	• • •		4,682
1916	• • •	•••	• • •	• • •	•••		• • •	• • •	•••	• • •	•••	•••	5,033
1917	• • •	•••				•••		•••	•••		•••		6,773

## 2.—PROVINCIAL MEDICAL COMMISSIONS.

As will be seen from the attached table, 8,773 medical certificates were issued by the eighteen Provincial Medical Commissions during 1917, an increase of 746 over last year.

TABLE XLVIII.—Annual Return of Medical Examinations made by the Central Medical Commission of Cairo during the year 1917.

	1			<u> </u>						CAI	ISES	OF R	EJEC	TION	<del></del>	· ·
	OBJ	ECT OF	FME	DICAL	EXAN	IINAT	ION.		OF	CAN	DIDA'		APPLY	ZING	FOR	
		]	NUMBE	R OF (	CASES.						Di	SEASES	s of			
MONTH.	For Admission to Service.	For	Sick Leave.	For Invaliding	ŧ,	For Determina-	Other Examinations if any.	TOTAL.	Defective Vision.	Urinary System.	Respiratory System.	Circulatory System.	Nervous System.	Digestive System.	Other Miscellaneous Diseases.	TOTAL
		Grauted.	Refused.	Invalided.	Fit for duty											
January	336	96	4	81	9	3	4	520	85	58	3	16				162
February	185	101	3	89	13	4	3	382	45	29	1	7	<u> </u>		1	83
March	277	127	10	85	12	5	2	496	59	31	1	26			1	118
April	274	141	5	74	16	4	8	501	68	43		15			3	129
May	319	170	12	82	19	3	3	577	82	32		10		_	2	126
June	281	150	10	98	16	2	24	555	67	27		10			2	106
July	353	153	10	134	13	2	4	646	65	37	_	12	_		4	118
August	196	175	11	305	33	5	2	683	50	24	2	9		_		85
September	295	145	10	173	13	3	3	619	59	33		11	1		1	105
October	242	191	15	222	11	5	1	661	53	20	1	8		_	4	86
November	257	160	11	178	15	13	3	611	57	30	2	13		_	1	103
December	198	140	12	172	4	7	5	522	53	18	2	6			2	81
Total	3,213	1,749	113	1,693	174	56	62	6,773	743	382	12	143	1	_	21	1,302

TABLE XLIX.—Annual Return of Medical Examinations made by the 'Central and Provincial Medical Commissions during the Year ending on December 31, 1917.

		Total.		1.302	87	98	16	5	74	57	51.	36	41	50	42	34	34	26	.08	18	11	П	1,905
rh		Other Miscella- neous Discases.		21		23	χG	1	£	-14	1	1	1	70			Н		ಣ	ಣ		<del></del>	56
APPLYING		Digestive System.		1	1			,	1	1	j	!	1	1	1	1	1	1	1	1			
OF CANDIDATES SERVICE.	r.	Nervous System.		Н		1	1	1	1	I	ı	1	П	1	1		1		1	જા			4
ON OF CAND	DISEASES OF	Circula- tory System.		143	62			1	্য	1	H	П	ઝા	ಣ		1	1	-	_	જા	1		158
CAUSES OF REJECTION FOR	,	Respiratory tory System.		12	1	1		1	જા	1	******	<del></del>	1	П	1			1	1	П	1	1	17
AUSES OF		Urinary System.		382	17	111	1	લ	16	4	10	10	12	22	1	$\infty$	10	4	1		1	1	509
CO		Defective Vision.		743	89	17	111	ಣ	46	15	61	£6.	- 26	19	23	25	55 53	66	16	6.	10		1,161
	Total			6,773	1,153	156	144	92	844	1,300	952	717	909	271	350	202	287	406	438	8699	270	113	15,546
		Other Examinations if any.		63	101	က		<del></del>	זכ	۰ ا	10	5.1 5.1	1	1	1	1	12	1	7.0	-			916
EXAMINATION.		For Determination of Age.		56		<del>-1</del> /	c)	ıo		j	6	9	9	_	4	1	~	-	na	ಣ	က	1	137
	NUMBER OF CASES.		Prt for duty	174	49	2	25	16	89	21.	159	98	65	13	37	28	23.	59	42	65	52	16	1,211
MEDICAL	MBER OI	For Invaliding from Service	Invalided.	1,693	268	50	58	34	233	671	503	500	192	44	103	99	09	163	146	151	129	.46	4,780
OF	Nu		Refused.	1131	27	<del>-</del>	જા		09	11	12	13	27	22	∞	17	$\infty$	4	1	12	2	<b>—</b>	365
OBJECT		For Sick Leave.	Granted.	1,749	289	51	55	56	464	550	182	374	293	132	178	144	124	147	197	177	75	50	5,224
		For Admission to Service.		3,213	472	78	61	10	144	62	248	115	115	76	65	82	83	95	85	29	63	17	5,186
	y			Com.	:	:	:	:	:	:	:	:	:	:		:	:	:	:	: .	:	:	
	COMMISSIONS	•		[edical	n	:	:	:	:	:	:	:	:	:	:	:		:	•	:	:	•	Total
	COMM			Central Medical Com.	Alexandria	Suez	Port Said	Damietta	Beheira	Gharbîya	Minûfîya	Daqahlîya	Sharqîya	Qalyûbîya	Gîza	Faiyûm	Beni Suef	Minya	Asyût	Girga	Qena	Aswân	To:

## VII.—REPORT ON THE INSPECTORATE OF PHARMACIES.

During the year it has been possible to carry out the work of the Inspectorate more efficiently; by reason of the appointment of an Assistant Chief Inspector. The service is, however, in need of still more inspectors, as the number of pharmacies increases every year (from 336 in 1916 to 369 in 1917), and in order to exercise a proper control over every person holding an authorization to deal in poisons (see table).

Opium.—The question which has more especially occupied the attention of the

Inspectorate is that of the existing legislation concerning Egyptian opium.

Although the cultivation of poppies is unrestricted, the commerce in opium obtained therefrom is governed by means of special authorizations granted to certain individuals to purchase Egyptian opium solely for export. From information received annually from the Ministry of Agriculture it has been noticed that the number of feddâns devoted to the cultivation of poppies increases every year, the number in 1917 being 1,379. None of the authorized dealers has purchased any opium, and consequently no export has taken place. It is very evident, therefore, that a clandestine commerce is being carried on in contravention of the regulations in force, as it is difficult to believe that the cultivators are storing their crops indefinitely.

The Chief Inspector of Pharmacies has published (under instructions from the Public Health Administration) a carefully compiled treatise on the subject of Egyptian opium, and it is hoped that the question will again receive consideration. It would be preferable either to exercise a proper control over the cultivation of poppies and the disposal of the opium, or else leave the commerce of opium entirely free in the country. It has come to the knowledge of the Inspectorate that the Ministry of Agriculture is also considering the question, and it proposes—on the recommendation of this Department—to prohibit the cultivation of poppies during the war and to arrange, later on, effectually to

control the trade in opium.

In the event of this question being properly studied, the decisions taken at the International Commission on opium at the Hague in 1911 might usefully be considered.

Contraventions for illegal traffic in opium are very frequent. During 1917 twentythree procès-verbaux of contravention were drawn up, twenty of which led to conviction

and sentence, two to acquittal, and one was filed.

Satisfactory inspections of premises where native dealers keep their stocks are very difficult to carry out; in fact, almost impossible. They are, for the most part, 'attârs who, almost without exception, keep a small quantity of opium hidden in their shops. As a rule, this is easily discovered, but the reserve stock is usually kept at their private houses; the inspection of such places demands certain formalities, and hardly ever gives satisfactory results. The maximum penalty inflicted by the law is closure of the shop and a fine not exceeding P.T. 100, and the confiscation of the opium seized during the inspection. These quantities are usually insignificant, and the profit obtained by the dealers from this illegal traffic permits them to submit cheerfully to the fine and closure of the shop, which only obliges them to move to other premises.

Cocaine.—This evil still continues in the country. Full particulars were given in the Report for 1916. The Inspectorate regrets to add that certain medical practitioners are giving their assistance to those who traffic illegally in cocaine. It has been proved that a certain number of doctors habitually write prescriptions for cocaine in quantities varying from five to one hundred grammes, stating that it is for their personal use in their private clinics, though it would appear impossible for them to use such large quantities in their daily practice.

From information received it is known that this cocaine is disposed of to pharmacists, proprietors of pharmacies, and other traffickers, who sell it as they please, and the fact that pharmacists are not obliged to enter it in the registers kept for purposes of control renders the Inspectorate helpless. A similar abuse is now being carried on with the pharmaceutical extract of Cannabis indica (hashîsh), since the time Martial Law restrained

the use of hashîsh among the population of Egypt.

Pharmacists and Assistant Pharmacists.—The country is suffering from a serious shortage of pharmacists and assistant pharmacists. Since the outbreak of war the number of foreign pharmacists applying for authorizations to practise their profession in Egypt has been insignificant. All pharmacists who were enemy subjects have been expelled, many of those of the Allied countries have been mobilized, and others have died. In addition to this, owing to the influx of troops, many new pharmacies have been opened (see table), necessitating the employment of qualified managers, and, in consequence, the country is unable to find enough pharmacists for its needs. The number of those who obtain their diploma at Qasr el 'Aini (eight or ten per year at the most) is not sufficient to fill the gaps. The consequences were not long in making themselves felt. At the present time many pharmacies have been obliged to transform themselves into simple drug stores, owing to the impossibility of finding qualified managers, and even the Government has found great difficulty in recruiting pharmaceutical staff for the hospitals and the central stores. It is a question which merits attention.

A similar shortage exists as regards assistant pharmacists. The Law No. 20 of 1911 has restricted the apprenticeship of assistant pharmacists to a limited number of pharmacies, with the result that the number of persons able to obtain training is comparatively small. Proposals have been made by the Public Health Department to the Ministry of the Interior with a view to modifying Article 5 of the Law and to authorize every pharmacy which gives satisfaction on inspection to have apprentice assistant pharmacists.

This solution of the difficulty would greatly relieve the situation, as pharmacies are unable to carry on without a certain number of assistants.

General.—In spite of the war the provisioning of the country with drugs has proceeded normally, and it has not been necessary to deplore the absence of this or that essential medicine. As mentioned in the last report, this state of affairs is mainly due to the efforts of the Egyptian Government, and also to the facilities accorded by the Allied countries, which have been producing chemical and medical products. The re-exportation from Egypt of drugs remains prohibited, except in cases of absolute necessity, such as hospitals and charities, and also where the exportation would not cause a shortage locally.

The total number of pharmacies existing at the end of the year 1917 was 369, of which 195 belonged to qualified pharmacists, and 174 to unqualified persons. Unfortunately, the proportion of pharmacies owned by unqualified persons still continues very high, being 47 per cent of the total.

During the year, forty-two pharmacies have been closed (or transformed into simple drug stores), eighteen of which belonged to qualified pharmacists, and twenty-four to unqualified persons. Forty-three new pharmacies have been opened, twenty-one by qualified pharmacists, and twenty-two by unqualified persons.

Table L.—Statistics concerning Pharmacies and Authorized Poison Dealers for the Year 1917.

			···					
	CAI	ro.	ALEXA	NDRIA.	Prov	INCES.	Тот	CAL.
		nacies ed by		macies ed by		macies ed by		nacies ed by
	Qualified Pharmacists.	Unqualified Persons.	Qualified Pharmacists.	Unqualified Persons.	Qualified Pharmacists.	Unqualified Persons.	Qualified Pharmacists.	Unqualified Persons.
Pharmacies:—  Existing at end of year Inspected and found satisfactory Inspected and found unsatisfactory Inspected and found mediocre Opened during the year Closed ,, ,, Procès-verbaux for offences against the Law of 1904 and Law No. 20 of 1911 Sentenced Acquitted Filed Pending	$ \begin{array}{c} 85 \\ 34 \\ 6 \\ 23 \\ 10 \\ 11 \end{array} $ $ \begin{array}{c} 16 \\ 15 \\ \hline - \end{array} $	67 28 6 15 13 9 34 28 2 4	$ \begin{array}{c} 45 \\ 22 \\ 1 \\ 17 \\ 5 \\ 4 \\ 8 \\ 6 \\ \hline 1 \\ 1 \end{array} $	$ \begin{array}{c c} 33 \\ 19 \\ 1 \\ 12 \\ 5 \\ 6 \\ \hline                                $	65 26 1 14 6 3 14 8 1 5	74 28 3 12 4 9 26 20 3 2 1	195 82 8 54 21 18 38 29 1 7	174 75 10 39 22 24 65 52 5 7

TABLE LI.—(continued.)

	CAIRO.	ALEXANDRIA.	Provinces.	TOTAL.
Authorised Poison Dealers:-				
Number of authorisations granted up to the end of 1917	$\begin{array}{c} 75 \\ 20 \\ 17 \end{array}$	42 14 13	40 11 6	157 45 36
" II Retail Provisional for purchase of Opium for	20	13	15	48
export	9	2	5	16
drugs grown in the country for export Procès-verbaux for illegal sale of poisons and infractions of the Pharmacy Law		_	3	12
against druggists and private persons other than pharmacists or proprietors of pharmacies.	<b>1</b> 8	3	46	67
Sentenced	16 2	$\frac{1}{2}$	. 37	54 13

- (1) Ninety-three samples of medicine have been taken and submitted to analysis with the following results:—
  - (a) Five warnings were sent (Cairo, one qualified pharmacist and two unqualified persons; provinces, one qualified pharmacist and one unqualified person).
  - (b) Sixteen procés-verbaux of contravention were drawn up against qualified pharmacists, resulting in eight sentences and one acquittal (Cairo), one acquittal (Alexandria), and four sentences and two acquittals (provinces).
  - (c) Six procés-verbaux of contravention were drawn up against unqualified proprietors, resulting in two sentences, one acquittal, and one pending (Cairo), and two acquittals (Alexandria).
  - (d) Forty-four samples were found to be of good quality.

In cases where more than one sample is taken from one pharmacy, and all samples prove on analysis to be of inferior quality, only one *procés-verbal* is drawn up.

(2) Ten samples of  $manz\hat{u}l$  have been analysed, four being found to contain no narcotics, and six were found to contain poisons. Proces-verbaux were drawn up, and resulted in five sentences and one acquittal (provinces).

As compared with last year, there is a considerable reduction in the number of  $manz\hat{u}l$  samples analysed, owing to the fact that the Martial Law relating to  $hash\hat{i}sh$  deals with contraventions for this offence, as  $manz\hat{u}l$  usually contains  $hash\hat{i}sh$ .

(3) Eleven authorizations to practise as pharmacists have been granted to holders of the following diplomas: eight Egyptians, two Swiss and one Turkish.

No authorizations have been granted to assistant pharmacists.

- (4) Nine procès-verbaux have been drawn up for illegal sale of cocaine and morphine, six against qualified pharmacists, and three against unqualified persons, resulting in eight sentences, one acquittal, and one pending (Cairo); one sentence, one acquittal, one filed, and one pending (Alexandria); and one acquittal (provinces).
- (5) One warning was sent to a qualified pharmacist in Alexandria for an irregularity found in his pharmacy.

The points emphasised in this report, as well as in the preceding ones, clearly show the difficulties with which the Inspectorate has to contend in the application of the Pharmacy Law. The defects in the law which the Inspectors experience in its daily application prove the urgent necessity of a complete revision. It is quite time that a law, inspired by an experience of more than thirteen years, and by the great progress which has taken place during this time in other countries, should be instituted in order that the pharmaceutical profession should be raised to the position it merits.

## VIII.—REPORT ON THE ENGINEERING BRANCH.

The report on this branch of the Department's work is drawn up with reference to the financial year (April 1, 1917, to March 31, 1918).

#### 1.—Special Credits for New Works.

The following table shows various details concerning special credits granted for new works and the sums disbursed.

TABLE LII.—Constructional Work, Etc.

NAME OF WORK.	Sum granted in Budget 1917.	Total Grant.	Expenditure from April 1, 1917. to March 31, 1918.	Total Expenditure to March 31, 1918.
	L E.	L.E.	L.E.	L.E.
1. Alexandria Hospital:—				
<ul> <li>(a) Completion of pavilion for 90 beds</li> <li>(b) Completion of nurses' house</li> <li>(c) New shelter for out-patients and</li> </ul>	319 91	$9,800 \\ 2,800$	285	$7,842 \ 2,286$
new roads in grounds	1,140		1,081	1,081
2. Abbassia Fever Hospital:—	•			
(a) Completion of 1915 programme (b) New stores	2,300 660	15,300	137 487	9,019 487
3. Hôd el Marsûd Hospital :—				
Remodelling	3,500	<del></del>	3,454	3,454
4. Central stores:—				
Construction of a second storey for accommodation of inventory clerks	1,500		1,060	1,060
5. Qasr el 'Aini Hospital:—				
Purchase of hot-water boiler and washing machines	270			

The following brief notes give certain information concerning the above works:—

Alexandria Hospital.—Completion of pavilion of ninety beds. This building was constructed and occupied in 1913. The credit granted in 1917 was for completion of painting, which could not be executed before, owing to the premises having been occupied by military cases. The painting was executed departmentally.

Nurses' House.—This building was constructed in 1914 and occupied. The credit granted in 1917 was for the completion of painting, which could not be done before, owing to these quarters having been occupied by extra nurses for military cases. This painting was executed departmentally.

New shelter for out-patients and new roads in grounds.

A new verandah was constructed in béton armé for the out-patients at a cost of L.E. 355, plus L.E. 89 for benches. This work was completed on October 19, 1917. The main roads to the hospital were macadamized at a cost of L.E. 637. This latter work was undertaken by the Alexandria Municipality.

Abbassia Fever Hospital Extensions.—Completion of 1915 programme.

The existing roads have been repaired and new roads made for the new pavilions, which were constructed in 1916.

New Stores.—Additional stores have been constructed. The work was completed and handed over on January 1, 1918.

Hod el Marsûd Hospital, remodelling, etc.—This hospital has been enlarged, remodelled, and completely renovated. New quarters have been erected for the matron, electric light and an improved water supply have been installed, the drains have been connected to the Cairo sewerage system, percolating pits have been abolished, a rubbish destructor has been built, and the courtyards have been macadamized and footpaths asphalted.

Central Stores, construction of a second storey.—A second storey has been constructed for accommodation of inventory clerks. This work was completed on February 12, 1918.

Qasr el 'Aini Hospital, purchase of new hot-water boiler and new washing machine.— The existing washing machines have been at work since 1903. A new washing machine was ordered from England, but, owing to present circumstances, could not be delivered. The existing machines have been repaired to meet the requirements of the hospital until the new one can be supplied.

The steam boilers at this hospital have been fitted with crude-oil burners at a cost of L.E. 70. An economy of some L.E. 600 per year is anticipated at the present price of coal.

#### 2.—Repairs.

The repairs and furniture credit for the budget year 1917–1918 were L.E. 5,976+800= L.E. 6,776.

The expenditure was: repairs, L.E. 5,976; furniture, L.E. 774·407 Mills.

The following repairs were effected:—

TABLE LIII.—RAPAIRS, ETC.

NAME OF BUILDING.	Repairs.	Furnitu <b>r</b> e.	NAME OF BUILDING.	Repa	irs.	Furniture.
	L.E. M.	L.E. M.		L.E.	м.	L.E. M.
Abbassia Fever Hospital.	689 722		Brought forward	4,426	490	552 710
Alexandria Hospital	110 035					
Asyût Hospital	$16 \ 464$	<u> </u>	Asyût Ophthalmic Hospital	l .	690	_
Aswân Hospital	10 420		Beni Suef Oph. Hospital		495	_
Benha Hospital	9 736	104 143	Damanhîr Ophthalmic	_	100	
Beni Suef Hospital	22 172	1 950	Hospital	i	400	_
Damanhûr Hospital	7 355	_	Faiyûm Oph. Hospital		118	_
Isna Hospital	10 980		Mansûra Oph. Hospital		110	
Faiyûm Hospital			Minya Oph. Hospital	1	930	<del></del>
Hôd el Marsûd Hospital		5 782	Shibîn el Kôm Ophthalmic	70	040	
Qasr el 'Aini Hospital		291 840	Hospital	1	040	
Qalyûb Hospital			Sohâg Oph. Hospital		806	
Mansûra Hospital	29 964	32 305	Tanta Oph. Hospital	343		-
Minya Hospital	$\frac{25}{16} \frac{504}{593}$	02 000	Zagazig Opli. Hospital	1	055	$23 \ 250$
O TT 1 1	$\frac{10}{23} \frac{3.5}{255}$		Buildings, Central Administration		415	29 280
Jena Hospital Port Said Hospital and	40 400				410	
Infectious Hospital	433 757	24 794	Institutes, Central Administration	175	812	_
Suez Hospital	180 266	. —	Public latrines		035	
Shibîn el Kôm Hospital	714 386	_	Disinfecting stations			102 189
Sohâg Hospital	15 660	_	Scavenging and Watering		001	102 100
Canta Hospital and Infect-	1.77 000		Service	190	505	
ious Hospital	109 039	_	Public Health Offices, etc.		554	28 863
Zagazig Hospital and In-			Miscellaneous	295	773	38 115
fectious Hospital	597 732	91 896				
			·			
Carried forward	4,426 490	552 710	TOTAL	5,976	000	774 407

## 3.—Works Paid for by Other Administrations and Executed Departmentally.

The following works were executed departmentally and paid for by other Administrations:—

On "Dépenses Militaires."	13.13.
Lock Hospital, Ezbekîya, sundry repairs	37
and bell installation	$\begin{array}{c} 434 \\ 33 \end{array}$
Public Women's Hospital, Moharrem Bey, building kitchen	17
On Provincial Councils' Account.	0.4
Santa Ophthalmic Hospital	$\frac{31}{8}$
Kafr el Dauwâr Ophthalmic Hospital	1
On Ophthalmic Hospitals' Credit.	
Sundry repairs, Travelling Ophthalmic Hospitals (Gîza, Fuwa, Benha). Imbâba Ophthalmic Hospital	9 8 7
Qena Ophthalmic Hospital	7
On Deposit from Shawarbi Pasha's Waqfs.	
Qalyûb Hospital:— Repairs and painting	370
New doorway under staircase	$\begin{array}{c} 6 \\ 61 \end{array}$
New coal store	0.1
4.—Sanitary Installations.	
(Calendar Year, January 1 to December 31, 1917.)	
Government Buildings, Schools, Latrines, etc.	Number.
Examined, reported on, and approved	24
Etablissements Insalubres.	
Examined and reported on	· 229 103
	100
Mosques. Old Mosques (Private) examined and reported upon	. 397
New Mosques, plans approved	21
Wakfs Mosques, plans of sanitary installations approved	
	7

## IX.-REPORT ON THE STORES BRANCH.

#### EXPENDITURE.

The following is a comparison of the budgetary estimates for the years 1916–1917–1918:—

TABLE LIV.—Comparative Budgetary Estimates.

	1916	1917	1918
	L.E.	L.E.	L.E.
Equipment	$ \begin{array}{c cccc} 19,857 \\ 4,223 \\ 20,196 \\ 6,783 \\ 720 \\ 2,441 \\ 733 \\ 681 \end{array} $	43,460 7,565 20,425 24,397 929 4,030 200 639	32,481 10,743 19,162 35,233 425 4,326 2,100 888
Total	55,634	101,645	106,358
	1915	1916	1917
Stores bought locally	30,777 14,946	54,000 34,000	9,015 88,800

## BUDGET.

Before introducing the Budget for the year 1918–1919 the entire system of estimating stores' expenditure, in relation to the different sections of the Department, was taken under review. It was felt that the general headings of expenditure shown above afforded no information to the Department concerning the consumption of stores by the various Sections, nor did they provide a sufficiently detached classification of control for the Director of Stores.

A system was elaborated whereby it was proposed to present store budgets for each of the following sections:—Section II, Section III, Section IV, Public Health Laboratories, General Expenditure. At the same time, a more detailed classification of the budget was framed, and as contract schedules had already been remodelled to ensure a homogeneous classification of articles for the convenience of tenderers, an attempt was accordingly made to combine all these features in one single system. This was only partially attained. For the system to be wholly successful it was essential that the classification of articles in the stores ledgers, in the stores estimates, and in the contract schedules should be the same. It is obvious that the gain in efficiency of control and work would be considerable. Unfortunately, the scheme raised objections on the part of the Ministry of Finance, and it was only possible to introduce a modified classification of the estimates and carry out the revised contract schedules. At present there is a different classification in store ledgers (Book 118 and 115), another classification in the estimates and another in contract schedules. It is hoped to overcome a considerable amount of this divergence when the new stores' catalogue is issued (awaiting printing), which will bring stores books more into line with the estimates.

The following replica of the stores' estimate will indicate the importance of having a single efficient system instead of three different classifications:—

## Equipment.

Permanent, by contract.

Permanent, locally.

Consumable, by contract.

Consumable, locally.

Clothing, permanent, by contract.

Tentage, consumable, by contract.

Tentage, consumable, locally.

Motor cars and motor cycles, bicycles, permanent, special and local.

Running material for motor cars and cycles, and spares for bicycles.

#### New Demands.

Permanent, by contract, for Qasr el 'Aini Hospital.

Disinfecting apparatus (Cairo City Health), permanent, special.

Permanent, by contract

Permanent, locally

Consumable, by contract

Consumable, locally.

Frontier Districts Administration.

## Epidemic.

Permanent, by contract.

Consumable, by contract.

Permanent, special and locally Consumable, special and locally

and new demands, permanent, by contract.

Consumable, by contract.

## Drugs.

Permanent, by contract.

Consumable, by contract.

Consumable, special.

Special chemicals for the P.H.D. laboratories.

Consumable, locally.

#### $New\ Demands.$

Permanent, by contract.

Consumable, by contract.

Special and locally.

Frontier Districts Administration.

Consumable, by contract.

(Epidemic Section.)

Consumable, by contract. (Hospital Laboratories.)

## Instruments.

General surgical instruments, permanent.

General surgical intruments, consumable.

Eye instruments, permanent.

Eye instruments, consumable.

Sundries and appliances, permanent.

Sundries and appliances, consumable.

x-Ray accessories, permanent.

x-Ray accessories, consumable.

Laboratory articles, permanent.

Laboratory articles, consumable.

#### New Demands.

Frontier Districts Administration.

Asyût hospital.

Damanhûr hospital.

Benha hospital.

Suhag hospital.

Faiyûm hospital.

Qasr el Aini hospital.

Aswân hospital.
Tanta hospital.
Qalyûb hospital.
Qena hospital.
Isna hospital.
Shibîn el Kôm hospital.
Fever hospital, Abbassia.
Damietta hospital.
Beni Suef hospital.
Minya hospital.
Zagazig hospital.
Mansûra hospital.
Port Said hospital.
Alexandria hospital.

Instruments and apparatus for P.H.D. Laboratories, permanent.

Laboratories.—A regular stores' estimate was also introduced for the Public Health Laboratories. Owing to the impossibility of foreseeing, eighteen months in advance, the nature of demands which would arise for analysis, epidemics, etc., the framing of a regular budget presented considerable difficulty. The following method and chapters of expenditure were finally adopted:—

I. Chemicals ... ... Based on an establishment and wastage.

II. Instruments ... ... Annual estimate (annual average issues disregarded)

III. Glassware ... ... A single money grant (L.E. 400).

Frontier Districts Administration.—The medical services of the Frontier Districts Administration necessitated separate estimates to the amount of L.E. 15,000. These were inserted in the Stores' Budget of the Department under the form of separate stores' estimates, which may probably disappear as such when issues have been made over a period of three years.

Motor Cars.—Other special items of expenditure were the grant for motor vehicles and the very large expenditure on tentage.

The number of motor cars and motor bicycles is rapidly increasing, but appears to be still far below the requirements of the Department. The establishment at present is nine motor cars and thirty-one motor bicycles.

Tentage.—For tentage the sum of L.E. 9,230 was approved for epidemic requirements alone. This large item is due to the circumstance that mat hutting is not weather proof in the Delta and had consequently to be replaced by something more substantial. Although the initial cost is considerable, the longer life of tentage, as compared with huts, will effect a substantial economy to the Government in the long run.

Vaccination.—The increased vaccination which was undertaken during the year also led to additional expenditure, 500,000 vaccine tubes in lieu of the estimated 50,000 having to be procured, besides other special equipment for keeping vaccine at a cool temperature in each Markaz and Kism.

Surgical Instruments.—A special feature of the estimate was, further, the large item of L.E. 10,700 for "New Demands" in the expenditure on surgical instruments. This sum was allotted to provide deficient equipment and instruments outside of the routine articles. In reality it represents a deficiency in the surgical establishment of hospitals, and if hospitals are to be expected to have up-to-date equipment, "new demands" will remain a permanent feature of the Department's estimates. They include x-ray apparatus and new installations.

As regards this branch of surgical equipment, all hospitals with the exception of nine are now installed, but while the expenditure for replacing worn-out accessories, such as coils, transformers, tubes, etc., remains low in the first years, this item must gradually increase, when the necessity for a more uniform standardization of x-ray equipment will make itself felt.

Considerable difficulty has been experienced in obtaining expert mechanics for repairing the new installations, and this drawback has not yet been overcome.

#### SUPPLIES.

The difficulty experienced in 1916 in obtaining stores became more accentuated in 1917. The restriction of transport, owing to submarine warfare, was felt very acutely by the Department, especially in the matter of drugs. In some instances the delay in receiving supplies amounted to over one year. To obtain suitable substitutes and maintain as high a standard of equipment as possible became a matter of considerable difficulty, which was further emphasised by the fact that many of the Department's standard articles were of enemy origin, notably so in glass and enamel ware. In many instances the home market is still below the quality of these articles, but the discrepancy seems to be gradually being overtaken.

Scarcely a single store contract was adequately filled by contractors, and as, unfortunately, no instructions or prevision were available to guide the Department in the special circumstances prevailing, a considerable amount of extra work was imposed in meeting the many legal and commercial problems which arose. At the same time, the need for stores largely increased to meet local military requirements, either directly or indirectly, and it is in a great measure due to the readiness of all units to economize wherever possible that the Central Stores was able to keep the Department going throughout the year.

Home Contracts.—The policy of getting into touch with the manufacturers, instead of securing supplies through middlemen, was further developed by organizing a series of standard samples to be shown in London (Sir Arthur Webb's office). This measure has been of the greatest utility, enabling a clear division to be made between local manufacturers and home products.

With normal circumstances again prevailing the advantage of the change should be still more marked.

It must, however, be noted that there is a possibility of the scheme being reversed should the Home Government decide rather to encourage a local market than to continue the policy of home firms supplying direct to clients abroad.

It should not be forgotten that Government supplies form a very small part of the trade of Egypt, and the policy of an Imperial institution at home to deal with British trade abroad appears to be more in the direction of developing foreign local markets.

Standard Samples.—A new sample store has been installed and filled, as far as possible, with samples to guide supply. The store now contains 850 samples. Formerly there existed no definite systeme of standard samples and but few samples.

Analysis.—The following table shows the increase in the number of analyses since 1914. Most of the samples examined by the Government Laboratory were textiles, which can only be adequately tested in a laboratory.

	1914	• • •			• • •	• • •	28	(including	Engmeering	Section.)
	1915		• • •	• • •	• • •		70	,,	"	>>
	1916	• • •	• • •	• • •	•••	• • •	175	,,	"	"
	1617	• • •			• • •		268	,,	22	"
January	1918		• • •	• • •	• • •	• • •	83	(one month	1).	•

#### ORGANIZATION.

#### CENTRAL STORES.

Reserves.—During the year a considerable amount of organization has been carried through.

Perhaps the most important change has been the unification of the Central Epidemic Store with the other stores of headquarters. Formerly a separate central store existed for epidemic requirements, financed by a special epidemic store grant. An anomalous situation was thereby created in that the epidemic store stocked the same articles as the other stores, employed separate contracts and orders, and obtained its supplies when necessary from the other stores by purchase. The result was a great duplication of work and a defective system of supply and of reserves, which did not correspond to the growing expansion of the epidemic service. The Central Epidemic Store was accordingly

abolished and, in its place, a Central Store for consumable articles only instituted. This involved a radical change in routine, in order that all requisitions for permanent stores should be dealt with by one store and all consumable requisitions issued by another. The gain has accordingly been a double one. The main difficulty, however, was to ensure adequate reserves for the Epidemic Service, and to avoid the danger that a common reserve might be exhausted by one section of the Department to the detriment of the others. This point touches one of the serious store defects of the Department, namely, that the normal reserve allowed by the Government is not sufficient to meet the emergencies of a Department of Public Health.

This reserve is twenty-five per cent of the annual quantities in the estimates. To meet the defect an increased reserve for a limited number of articles was strongly pressed, but authority could only be obtained to increase the reserve of articles confined to epidemic requirements. The reserve in the latter case was raised to forty per cent. At present the establishment for the Epidemic Section is fixed to deal with 5,700 patients

at one time, with a reserve to meet a further 1,000 patients.

During the typhus epidemic (winter, 1917) the want of adequate reserves immediately made itself felt. Early in the year regular establishments had been worked out for the Epidemic Section of Abbassia Fever Hospital and Alexandria Hospital (Chatby). These sections were then definitely transferred to the Hospital Section, and the overlapping which had hitherto occurred disappeared. The typhus epidemic threw a heavy strain on the above hospitals, with the consequence that the reserve of necessary stores proved utterly insufficient. The whole of the epidemic reserve was drawn upon, and also stores which were earmarked to make up deficient equipments in provincial epidemic stores. A definite deficiency has therefore been created in the common reserve, especially in epidemic articles. This will be partly made good in 1919 by additional credits.

The permanent establishment for patients in huts at Abbassia is 400 beds, at Chatby

250 beds.

The epidemic provincial stores are still considerably below establishment, owing to the above reasons and to the non-arrival of stores from abroad.

Vocabulary.—With the revised classification of stores in the estimates and trade schedules it was necessary to compile a new catalogue of stores, in order that all store ledgers and requisitions would follow the same classification. The catalogue was completed towards the end of the year, but, owing to the dearth of paper, it has not been possible to have it printed. It contains 5,500 items, which required considerable revision, while, to facilitate reference, many items have been shown twice, viz., in the order in which they appear in the ledgers and again in their more natural classification. When the catalogue is introduced it will be necessary to make new ledgers throughout the whole Department.

Prior to commencing the work, 550 articles were cancelled which were either obsolete or considered superfluous.

Cholera Store.—Up to 1917, cholera stores were kept partly by the Engineering Section and partly by the Central Stores. A transfer to the Central Stores was made and a definite cholera store established. The value of this reserve is L.E. 18,750.

Hospitals.—The store organization for controlling the movement of stores inside of hospitals was considerably modified. The original system has in its main feature been adhered to, but has been expanded to provide sufficient control. The details are given in Departmental Order No. 77.

The peculiar feature of all hospitals and epidemic stores is that they are at the same time a supplying store to their unit (like the Central Stores) and also a *chargé*, that is, the actual user. This anomaly makes it at times difficult to arrange a stores organization which will meet the needs of the Department and also fit into the Stores' Regulations. Hospitals at home are self-contained, having their own supplying store, from which issues are made to the hospital.

Drugs.—A system of control was instituted for provincial epidemic stores to meet the growing consumption of drugs. In lieu of frequent requisitions on the Central Store, small stocks of drugs were sent to the provinces and placed under the control of the hospital pharmacist. Details are given in Departmental Order 73, 1917. The policy of having all Government Departments procure their drugs from our Central Stores appears to have been definitely established, as during the year the Department was called on to supply many new Departments to the extent of about L.E. 2,000. This is outside of those Departments which already purchase their stores off the Department's contracts, viz. Prisons, Coast Guards, Lunacy Division, and some Provincial Councils. The Egyptian State Railways Administration and the Ministry of Waqfs appear to be now the only Departments in Egypt purchasing their drugs directly.

Contracts.			
	1915	1916	1917
Number of contracts made during the year	130	100	115
Total value of contracts of the Department, including rations,	etc	91,124	146,792
Value of contracts for Central Stores:—			
Equipment		22,571	44,930
Drugs		16,125	11,280

The general adjudications of equipment and drugs for the year 1917-1918 were the largest experienced in the Department.

The following were the main items:—

							Equ	IPMENT.								
							L.E.									L.E.
Bedsteads	• • •					• • •	1,812	Drawers						• • •		1,030
Blankets, brown	1	• • •		•••	• • •		864	Gallabîas,	W.			• • •				1,580
Blankets, white							1,245	Gall <b>a</b> bîas.	В.							850
Sheets, bed				•••			3,194	Wood						• • •		2,383
Slippers							865	Drums			• • •		• • •			170
Washing soap							1,120	Tents	• • •		• • •	• • •		• • •	• • •	9,230
Shirts							1,605									
							Dв	ugs.								
								.000.								T 12
C1 774							L.E.	57 11								L.E.
Cyllin					• • •	• • •	2,173	Vaseline	_• • •	• • •	• • •	• • •	• • •		• • •	395
Alum		• • •		• • •		• • •	1,295	Cotton we	ool				• • •		• • •	1,130
Castor oil				• • •	• • •		365	Gauze	• • •	• • •	• • •					4,280
Chloroform			• • •	• • •	• • •		560	Lint						• • •	• • •	415
Mag. sulph.	• • •	• • •	• • •	• • •	• • •	• • •	235	Dressing			• • •					145
Sod. sulph.		• • •		• • •			105	Mackinto	sh	• • •		• • •	• • •			115

## GENERAL EQUIPMENT.

TABLE LV.—Comparison of Prices of Main Items for the Years 1915, 1916 and 1917.

						Rate in Milliemes.					
tem No.	Description.					1915	1916	1917			
80	Bedsteads, 2nd class	• • •	• • •	• • •		2,230	4,600	4,350			
104	Blankets, white woollen		• • •	• • •		550	850	622			
107	" brown " …			• • •	• • •	405	510	900			
133	Boots, shawishes	• • •	• • •	• • •		335	575	620			
228	Cases for mattresses	• • •	• • •	• • •		318	550	440			
416	Drawers, 2nd class		• • •	• • •		46	53	165			
468	Gallabîas, large	• • •	• • •	• • •		125	182	265			
495	Gowns, hospital	• • •	• • •		• • •	685	1,080	1,100			
547	Jackets, calico	• • •	• • •			61	82	96			
569	Jerseys, blue		• • •			188	350	375			
706	Mattresses, felt		• • •	• • •		192	440	304			
765 a	Pannikins, aluminium		• • •	• • •		60	49	60			
866	Pots, copper			per k	ilo.	115		593			
981	Sheets, 2nd class		•••	•••		366	490	485			
984	" draw, thick			• • •		108	290	290			
991	Shirts	• • •		• • •		54.2	75	82			
1011	Shoes, Tamurgis					205	320	250			
1037	Slippers	• • •	• • •			145	200	170			
1190	Towels, white					64	130	130			
1455	Crin végétal	• • •	1	per k	ilo.	11	12	18			
1594	Material No. 3		pe	er më	etre	21	24.5	77			
1608	,, No. 17, bed ticking	• • •		,,		69	150	102			
1630 -	,, No. 39, blue flannel			"		265	360	370			
1660	Arachide oil		]	per k	ilo.	57	70	70			
1770	Soap, washing	•••		"		35	49	42			
1771	,, 'soft	•••		,,		34	$5\overline{5}$	40			

## TABLE LV—(continued).

,		RATES.		VA	LUE OF CONTRA	CT.
Contract.	1915	1916	1917	1915	1916	1917
	L.E. M.	L.E. M.	L.E. M.	L.E.	L.E. M.	L.E.
Petroleum per tin Crude oil per kilo Milk, in tins ,,  Meat for Qasr el 'Aini Hospital:—		0 045	0 048	420 110 232	595 000 172 000 540 000	351 290 684
Mutton ,,  Beef ,,  Ment for Fever Hospital:—  Mutton ,,  Beef ,,	$\begin{bmatrix} 0 & 060 \\ 0 & 045 \\ 0 & 065 \\ 0 & 050 \\ \end{bmatrix}$	0 055 0 040 0 055 0 045	0 080 0 062 0 090 0 062	$\left.\begin{array}{c} 2,500 \end{array}\right.$	3,566 000	2,900
Native bread:— Qasr el 'Aini Hospital ,, Fever Hospital ,, Bersîm, Scavenging and Water-	$\begin{bmatrix} 0 & 010\frac{3}{4} \\ 0 & 011 \end{bmatrix}$	$\begin{array}{ccc} 0 & 009\frac{1}{2} \\ 0 & 009\frac{1}{2} \end{array}$	$\begin{bmatrix} 0 & 022 \\ 0 & 023\frac{3}{4} \end{bmatrix}$	1,955	1,615 000	5,170
ing Service per qantâr Straw bedding per ton Tibn (from Domains) , Rabbits for Antirabic Institute each	$\begin{bmatrix} 1 & 350 \\ 3 & 000 \end{bmatrix}$	$ \begin{array}{cccc} 0 & 035 \\ 1 & 100 \\ 2 & 380 \\ 0 & 060 \\ \end{array} $	$\begin{bmatrix} 0 & 035 \\ 1 & 280 \\ 2 & 380 \\ 0 & 135 \end{bmatrix}$	$ \begin{array}{c c} 815 \\ 513 \\ 2,280 \\ 192 \end{array} $	$\begin{bmatrix} 906 & 000 \\ 396 & 000 \\ 1,808 & 000 \\ 108 & 000 \end{bmatrix}$	$\begin{array}{c} \cdot & 907 \\ 350 \\ 1,933 \\ 148 \end{array}$
Rations for Cairo hospitals	$\begin{bmatrix} - \\ 0 & 019\frac{1}{2} \\ 0 & 019 \end{bmatrix}$	$\begin{array}{ccc} - & - \\ 0 & 032\frac{1}{2} \\ 0 & 036 \end{array}$	$\begin{bmatrix} - \\ 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$	$\begin{bmatrix} 8,172 \\ 24,160 \\ 588 \\ 225 \end{bmatrix}$	$\begin{bmatrix} 13,908 & 820 \\ 32,492 & 647 \\ 1,405 & 966 \\ 507 & 750 \end{bmatrix}$	9,700 $33,590$ $1,300$ $765$
Equipment, etc		  	,	$ \begin{array}{c c} 16,180 \\ 9,472 \\ 1,754 \\ 5,108 \end{array} $	$\begin{bmatrix} 22,571 & 165 \\ 15,604 & 480 \\ 520 & 953 \\ 2,212 & 000 \end{bmatrix}$	$\begin{bmatrix} 44,930 \\ 24,340 \\ 521 \\ 5,080 \end{bmatrix}$
Disinfecting drums		<u>-</u>		<u>-</u> -	.—	170 2,283 5,807

## Drugs.

As anticipated in last year's Report, the high level of prices was maintained during 1917.

TABLE LVI.—Comparison of Prices of Drugs.

,							Price in Milliemes.					
•	DESC	RIPT	ION.				1915	1916	1917			
	• • •	•••	•••	•••	per	kilo.	915	6,000	2,463			
	• • •	• • •				"	035	043	067			
Acid, carbolic		• • •			•••	"	126	280	280			
$egin{array}{cccccccccccccccccccccccccccccccccccc$		• • •	• • •		• • •	"	$019\frac{1}{2}$	$032\frac{1}{2}$	032			
Bismuth carbonate	e	• • •	• • •		• • •	"	1,251	1,950	1,597			
	• • •	•••			• • •	,,	061	071	071			
		• • •		• • •	•	"	110	148	115			
	• • •	• • •			•••	"	1,972	2,193	2,223			
Magnesium sulpha	ite	• • •		• • •	• • •	,,	009	020	029			
	• • •	• • •	• • •	• • •	• • •	,,	039	103	153			
	• • •	• • •	• • •			"	089	079	158			
	• • •	• • •	• • •	• • •	• • •	,,	3,047	5,000	5,831			
Potassium iodide		• • •	• • •	• • •	* * *	,,	1,422	2,240	1,680			
Potassium bromid	е	• • •	• • •	• • •	* * *	"	1,800	2,441	985			
Quinine sulphate		• • •	• • •	• • •	• • •	,,	2,021	3,952	5,331			
Sodium bicarbonat	te	• • •	• • •		• • •	"	006	011	016			
	• • •	• • •	• • •	• • •	• • •	"	076	100	107			
Sodium salicylate.		• • •	• • •	•••	• • •	,,	577	2,490	1,133			
	••	• • •		• • •		"	036	167	246			
$\operatorname{Iodoform}  \dots  .$	• • •	• • •		• • •	• • •	,,	2,660	2,405	2,655			

Aspirin, potassium iodide, potassium bromide fell in price, while sulphate of quinine and cotton-wool almost doubled.

Preparations to the value of L.E. 5,504 were made in the Drug Store.

			L.E.
1915	• • •		 5,125.
1916	• • •		4,933.
1917	• • •	• • •	5,504.

Medicines to the value of L.E. 3,195 were sold in the various dispensaries of the Department, as against L.E. 2,963 for 1916.

The laboratory equipment for pharmaceutical preparations was increased by the addition of a new steam boiler of 130 litres capacity and of a new filling machine.

The new tablet machine turned out 260,000 tablets of quinine during the year.

The expansion of the Department is throwing an increasing strain on the Central Drug Store, whose staff is not adequate to cope efficiently with the large volume of work demanded of it.

To meet the deficiency, steps have been taken to abolish unqualified employees, such as dispensary servants, and replace them by properly qualified assistant druggists.

## STORE TRANSACTIONS.

The following statistics cover the general work of the store-keeping and accounting offices for the Central Stores of the Department:—

	laa		1				
	1881	ued.	Stores received at Headquarters.				
	1916	1917	1916	1917.			
quipment Orugs Didemic Dilaq Store Durgical instruments Cohna Store Dorage Lygienic Institute	6,275 $3,322$ $2,433$ $202$ $1,625$ $3,459$ $145$ $13$	10,053 3,830  740 2,149 4,922 172 27	2,221 540 1,182 63 355 2,050 119 13	$ \begin{array}{c} 3,226 \\ 507 \\ -138 \\ 372 \\ 2,712 \\ 172 \\ 27 \\ . \end{array} $			
TOTAL	17,474	21,893	6,543	7,154			
Number of charges of	permanent stores	in the Departmen	<b>1916</b> t 250	1917 255			
Value of stores iss From General From Epidem	l Stores	. •••	6,404 769	L.E. 16,050 425			
Value of stocks on Instrument St Drug Store Equipment St Kohna Store Bûlâq Auxilia	ore	· · · · · · · · · · · · · · · · · · ·	22,294 112	5,198 27,784 40,875 271 8,611			

#### ORGANIZATION.

#### CENTRAL STORÉS.

Stores:--

(13 storekeepers, 45 storemen).

Equipment Permanent Store. Equipment Consumable Store.

Surgical Instrument Store.

Kohna Store.

Drug Store.

Auxiliary Store.

Ledger Section.—Twelve clerks; sixty ledgers and journals are kept.

Permanent Charge Section.—Eight clerks, 238 ledgers. Two hundred and fifty-five permanent charges, 150 individual charges, 500 personal charges for uniforms.

Supplies Section.—Six clerks. One hundred and fifteen contracts and 1,844 orders were dealt with this year.

Registration and Archives Office.—Six clerks. 35,927 inward letters, including requisitions, and 9,265 outward letters (not including forms and vouchers) during the year.

Correspondence and Personnel Office.—Two clerks.

## STAFF.

The following increase of staff has been authorized:—

Sub-Director	• • •	• • •	• • •	• • •		• • •	• • •	• • •	1
Employés, 4th class	• • •	• • •	• • •	• • •		• • •	• • •	• • •	5
Assistant Pharmacist	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	1
Storekeeper, 4th class	• • •	• • •		• • •	•••	• • •	•••	• • •	1
Temporary clerks		• • •		• • •	• • •	•••	• • •	• • •	2
Foremen, workshops									
Shawîsh									
Packer									
Courrier									

If the Stores Section is to keep pace with the expansion of the Department, further augmentation is necessary.

The staff is now as follows:—

#### PENSIONABLE STAFF.

T. I.	MOL	JMAI	OLE	$\mathcal{O}_{\mathbf{I}}$	AFF.					
Pensionable Staff:—										
Director of Stores	• • •	• • •			• • •		• • •		1	
Sub-Director	• • •				• • •	• • •	• • •		1	
Pharmacist, 3rd class	• • •		• • •		• • •	• • •	•••	•••	1	
" 4th class …	• • •	• • •	• • •		• • •	• • •		• • •	2	
Assistant Pharmacist	• • •	• • •	• • •	• • •	• • •	• • •		•••	1	
Sous-Chef de Bureau	• • •	• • •	• • •	• • •	• • •		• • •	•••	1	
Employés, 1st class		• • •	• • •		• • •	•••		• • •	2	
" 2nd elass …	• • •	• • •		• • •		• • •	• • •		2	
" 3rd class …		• • •	• • •		• • •	•••	• • •		2	
,, 4th class		• • •			•••	• • •	• • •	• • •	19.	
Storekeepers, 1st class	• • •	• • •	•••			• • •	• • •	• • •	1	
,, 2nd class	• • •	• • •	• • •	• • •	• • •	• • •			1	
,, 3rd class	• • •	• • •	• • •	• • •	• • •	• • •	• • •	•••	4	
,, 4th class	• • •	• • •		•••	•••	• • •	• • •	•••	7	, ~
										45
Workshops:—										
Chief Foremen	•••	•••	• • •	• • •	• • •	• • •	• • •	• • •	2	
Clerk of Works	• • •	• • •	• • •	• • •	• • •	. • • •	• • •	• • •	1	9
70 Ct. 3°	•							_		3
Temporary Staff:—										
Employés, temporary	• • •	• • •	• • •	•••	• • •	• • •	• • •	• • •	•••	12
Hors Cadre Staff :-										
Workmen, instruments'	wor	ksho	p		• • •				7	
Carpenters' workshop		•••	• • •	• • •	• • •	•••			19	
Blacksmiths',	•••		• • •	• • •	•••				12	
Tentmakers',	•••	• • •	• • •	•••	•••	• • •	• • •	• • •	9	
Tinsmiths',		• • •	• • •	• • •	• • •	• • •	• • •	• • •	4	
Tailors',		• • •	• • •	• • •	• • •	• • •	•••	• • •	7	
Painters',			• • •	• • •	•••	•••	• • •	•••	• 6	
Dispensary servants	•••	• • •	• • •		• • •	• • •		• • •	19	
Drivers and syces	• • •	• • •	• • •	• • •	•••	• • •		• • •	15	
Storemen	•••	• • •	•••		•••	•••	• • •	•••	45	
								-		143
					Тот	AL		• • •		203
									=	

The chief difficulty is that of finding competent storekeepers, and the question resolves itself into two alternatives, namely, either to pay larger salaries for more competent storekeepers or augment the storekeeping staff to lighten their duties. The latter is probably the policy which will be ultimately followed.

Inspection.—The inspection of all units of the Department begun in 1916 was completed during the year by the Inspector of Stores.

The principle followed in these inspections is the instruction of storekeepers in their

duties.

This is only effective locally, and, when successful, results in a distinct economy of correspondence and store transactions with the Central Stores. The improvement has been most marked, but it is an open question whether one inspector is sufficient for the needs of the Department.

#### WORKSHOPS.

A great increase of work was registered in the workshops for the year. The main items are given below.

ref1	. 00	•	7		C 11		
The	staff	100	creased	as	-toll	OWS	•
110	DUCTI	TILL	JICUDUU	ULN	1011	. 0 * * 0	

	*	37 1	1			EMPLO	OYEES.
	'	Vorks	nop.			1916	1917
Instrumen	te.					8	7
Carpenters		• • •	• • • •	• • •		19	19
Blacksmitl	18	•••		• • •		6	$\frac{10}{12}$
Tentmaker			• • •			5	9
Tinsmiths						 3	4
Tailors						 3	7
Painters	• • •		• • •	• • •	• • •	 8	6
			T	OTAL		 52	64

The budgetary grant was fixed at L.E. 4,030, of which L.E. 2,300 was spent in labour. The policy of making aseptic furniture instead of procuring it from abroad has been continued with success. All autoclaves and water sterilizers have also been procured locally with good results. The fact that the above equipment can be made satisfactorily in Egypt has attracted the attention of other Departments, and also of the Sudan Government.

The number of orders dealt with was 3,149.

On examining the following tables of the main items turned out, the most striking feature is the diversity of the work required by the Department. As a rule, the time entailed by such orders in estimating costs and actual manufacture is not commensurate with the value of the articles, and in this respect the Department's workshops are at a great disadvantage compared with more homogeneous workshops with larger output.

#### INSTRUMENT-REPAIRING SHOP.

## Ophthalmic Section.

Eye scalpels					1,901	Operation tables	• • •				• • •	2
Hypodermic nee	edle:	š		 	 386	Dressing tables		• • •	• • •			6
Eye forceps					25	Shelves for tables						20
Eye speculums					12	Perimeters		• • •			• • •	8
Eye scissors					97	Sterilizer forceps						5
Dressing scissor					26	Focussing lenses	• • •					-3
Double spoons					10	Electric batteries						8
Microtome kniv					19	Sterilizer lamps						4
Stethoscopes					7	Diaphragms		•••	•••	•••	•••	$7\overline{0}$
Microscopes					5	Discs, lead	***	• • •	•••	* * *	• • •	90.500
ricroscopes	• • •		• • •	 	 $\sigma$	Disos, rodu	• • •			• • •	• • •	20,000

## General Instrument Repairs.

						m						
Potain's aspirators					9	Trocars	• • •		• • •	• • •		18
Electric batteries					8	Bandage knives		• • •		• • •		1,400
Catheters	• • •				36	Mincing knives	• • •	• • •				246
Scoops	• • •				29	Lithotrites	• • •	•••		• • •		$\tilde{5}$
Probes and directors			• • •		80	Evacuation app.	•••					3
	• • •			V • •	280	~ · · · · · · · · · · · · · · · · · · ·		• • •	• • •	• • •	•••	
Artery forceps	• • •			• • •			• • •	• • •	• • •	• • •	• • •	14
Dressing forceps	• • •		• • •	• • • •	254	Chloroform bottles	• • •	• • •	• • •	• • •		11
Bone forceps	• • •	• • •	• • •	• • •	42	Centrifuges		• • •	• • •	• • •		6
Eye forceps		• • •		• • •	25	Wheels, irr. stands	• • •					7
Midwifery forceps					18	Bandage machines				•••		2
Tooth forceps		• • •			4	Stomach pumps		• • •				1
Mouth gags				• • •	10	Hammers	•••				• • •	$1\overline{5}$
CVI • 1					110	Ear speculas	• • •				• • •	$\frac{10}{2}$
F27 F21 (					. 5			•••,	• • •	• • •	• • •	ے 1
V T 7	• • •	• • •	• • •	• • •		Pile elamps	• • •	• • •	• • •	•••	•••	1
Hooks	• • •	• • •	• • •	• • •	8	Sterilizer lamps	• • •	• • •	• • •	• • •	• • •	6
Amputation knives	• • •	• • •		• • •	100	Sand baths	• • •	• • •	• • •	• • •	• • •	1
Bistouries					102	Water pillows				• • •		10
Cartilage knives		• • •	• • •		124	Distilling app						1
Scalpels					2,302	Somnoform app.						3
Eye scalpels	• • •				1,370	Chloroform masks		:		•••	• • •	8
P.M. scalpels	• • •	•••			215	Bone drill		•••	• • •	• • •	• • •	1
					$\tilde{185}$	Drills for bone drill		• • •	• • •	• • •	• • •	3
	• • •	• • •	• • •					•••	• • •	• • •	• • •	
Hypodermic needles	• • •	• • •	٠		1,515	Spatulas	• • •	• • •	•••	• • •	• • •	3
Suture needles	• • •	• • •	• • •		84	Extension app	• • •	• • •	• • •	• • •	• • •	2
Razors				• • •	352	Splints, iron		• • •	• • •			14
Retractors					5	Sponge holders					• • •	10
Amputation saws					32	Measures, tape		• • •				3
Finger saws		• • •			29	Thermo-cauteries					• • •	15
P.M. saws					$\frac{1}{32}$	Tracheotomy tubes			• • •	• • •		6
121					$64\overline{2}$	Bronchitis kettles	• • •				• • •	$\ddot{3}$
	•••								• • •	• • •	• • •	
Seissors, straight	• • •		• • •	• • •	1,188	Water machines	• • •		• • •	• • •	• • •	2
Scissors, eye	• • •	• • •	• • •		112	Operation stools	• • •	• • •	• • •	• • •	• • •	1
Scissors, P.M	• • •				58	Hair clippers	• • •				• • •	2
Speculas, vaginal					61	Tourniquets		• • •				2
Eye speculums					12	Primus stoves, 1 b	urne	er				224
Autoclaves					12							3
Instruments, sterilizers	•••	•••	•••	•••	$\frac{12}{12}$	$\overset{,,}{_{,}}$ $\overset{2}{_{3}}$	"	•••	•••			1
TT7 : 1 *1*		• • •			$\tilde{3}$	,, 4	>>	• • •	• • •	• • •	• • •	Ĕ
	• • •	• • •	• • •		26		"	• • •	• • •	• • •	• • •	$\begin{array}{c} 1\\5\\12\end{array}$
Dressing drums	• • •	• • •	• • •	• • •		Seals, copper	• • •	• • •	• • •	• • •	•••	1.2
Brass syringes	***	• • •	• • •		33	Spirit monopole lan	nps	• • •	• • •	• • •	• • •	5
Hypodermic syringes	• • •	• • •			54	Table spirit lamps	• • •	• • •	• • •			9
Lachrymal syringes				. % .	3	Soldering lamps		• • •				3
Dressing tables					9	Electric pocket lam	ps	• • •				10
Operation tables	•••		,		9	Spirit stoves						$\ddot{6}$
7\n_011 over	•••	•••		•••	$\overset{\circ}{2}$	Water baths			•••			$\overset{\circ}{9}$
Trephines	• • •	• • •	* * *	• • •	$1\overline{5}$	, attor batting	• • •	• • •	• • •	• • •	• • •	J
rrepnines	• • •	• • •	* * *	•••	10							

## BLACKSMITHS' SHOP.

## New Work.

Irrigator stands			• • •	• • •		10	Operation chairs	• • •		• • •	•••	10
Iron legs for beds					• • •	42	Handles, iron stretchers	• • •		• • •	• • •	8
Operation tables						8	Iron rods					56
Examination tables	• • •					16	Brackets for boards					25
Pail stands						10	Brackets for stretchers					12
Pins for tents						87	Iron cylinders					17
Instrument stands						2	Hinges, iron	• • •				25
Hooks						405	Mills, coffee, roasting			•••		4
Stands, iron, for sha	amsia	a				68 .	Caps, iron					538
Brackets						18	Zir supports					11
Brackets for lamps	• • •					1	Pipes, iron					13
Hooks, iron			• • •			40	Dressing tables		• • •			1
Brackets, lantern						15	Angles, iron			•••		367
Strainers, copper						10	Nails, iron					218
Splints			• • •			108	,,,		•••			

## Repairs.

				Repa	ers.
Bedsteads, second class				1,238	Mills, coffee 2
Brass locks		•••	• • • •	3	Bedsteads 2
Caps, indiarubber		• • •	• • •	40	Bed ticket holders 333
Bedsteads, iron, babies		• • •	• • •	22	Operation chairs 29
Spirit lamp tubes		• • •	• • •	15	Hooks, iron 92
Strainers, copper	• •••	• • •	• • •	11	Scrapers, iron 28
Cradles, bed Shears, garden	• •••	• • •	• • •	24 (i	Taps, copper 18 Barrels, large, G.I 4
Rakes, garden		• • •	• • •	12	Tocht supports
Clips for files	• •••	• • •	•••	4,039	Hose, $i.r.$ , fittings 18
Barrels, iron			• • •	1	Tables, iron, folding 82
Pipes	• • • •	• • •		8	Machines for crin végétal 1
Tables, instrument	• •••	• • •	•••	21	Dressing table 1
Wheelbarrows Bedsteads, first class	• •••	• • •	• • •	$\frac{3}{66}$	Sterilizers 2
TT' '	• •••	•••	• • •	$\frac{66}{242}$	Locks
Stands, iron, single		• • •	• • •	20	Trollays
Merlin chairs		• • • •		30	Iron rods for rat holes $\dots \dots \dots$
Brackets		• • •		95	Fins, tin dust 18
Awning fittings	• •••			13	Carts, tent 63
Perforators	• •••	• • •		5	Carts 34
Drums, cyllin		• • •	• • •	41	Wheel chairs 30
Latches	• •••	• • •	• • •	* 121 7	Stands, zîrs 18 Filters, iron 13
Axes, iron		• • •	• • •	5	Cumboards
Ironing stoves		• • •	• • • •	1	Wheels, iron
Stretchers		•••		$2\hat{6}$	Copying press 1
Kitchen stoves	• •••	• • •	• • •	1	
			CAF	RPENTE	RS' SHOP.
				New V	Vork.
Tables, various				4	Sofas 2
Poles for doors, tent		•••	• • •	86	Polos tent
Chests, ice		• • •	• • •	6	Splints
Baskets, paper			• • •	8	Ladders, step 6
				7.3	T) 1:
Holders, bed ticket	• •••	• • •	• • •	12	Packing cases 83
Cupboards, various		•••	• • •	58	Plugs, wooden 200
Cupboards, various Boxes, various	• •••	•••	• • •	58 495	Plugs, wooden 200 Chairs 25
Cupboards, various Boxes, various Shelves, various	• •••	•••	•••	58 495 20	Plugs, wooden       200         Chairs       25         Boards, various       287
Cupboards, various Boxes, various Shelves, various Wooden covers for jars	• • • • • • • • • • • • • • • • • • • •	•••	•••	58 495 20 170	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens	• • • • • • • • • • • • • • • • • • • •	•••	•••	58 495 20	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens	• • • • • • • • • • • • • • • • • • • •	•••	•••	58 495 20 170 8	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutabos       197
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens	• • • • • • • • • • • • • • • • • • • •	•••	•••	58 495 20 170 8	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes	• • • • • • • • • • • • • • • • • • • •	•••	•••	58 495 20 170 8 50 	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various		•••		58 495 20 170 8 50 	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various Stretchers		•••		58 495 20 170 8 50 	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various		•••		58 495 20 170 8 50  Repa 87 30 7 253	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various Stretchers Choppers Crutches				58 495 20 170 8 50  Repa 87 30 7 253 40	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various Stretchers Choppers Chairs Crutches Filters				58 495 20 170 8 50  Repa 87 30  7 253 40 5	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90
Cupboards, various Boxes, various				58 495 20 170 8 50  Repa 87 30  7 253 40 5 2	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various Stretchers Choppers Crutches Filters Crates Shovels				58 495 20 170 8 50  Repa 87 30  7 253 40 5 2	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Saindals, wooden, pairs       90         Boards, various       9         Ladders, step       4
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various Stretchers Choppers Crutches Filters Crates Shovels				58 495 20 170 8 50  Repa 87 30  7 253 40 5 2	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various Stretchers Choppers Chairs Crutches Filters Crates Shovels Cupboards Charts				58 495 20 170 8 50       	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20
Cupboards, various  Boxes, various  Shelves, various  Wooden covers for jars  Screens  Traps, rat, boxes  Tables, various  Stretchers  Choppers  Chairs  Crutches  Filters  Crates  Shovels  Cupboards  Cupboards  Chests, ice  Wooden boxes, various  Screens				58 495 20 170 8 50       	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12
Cupboards, various  Boxes, various  Shelves, various  Wooden covers for jars  Screens  Traps, rat, boxes  Tables, various  Stretchers  Choppers  Chairs  Crutches  Filters  Crates  Shovels  Cupboards  Chests, ice  Wooden boxes, various  Screens  Cases, packing				58 495 20 170 8 50 	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12         Doors       3
Cupboards, various  Boxes, various  Shelves, various  Wooden covers for jars  Screens  Traps, rat, boxes  Tables, various  Stretchers  Choppers  Chairs  Crutches  Filters  Crates  Shovels  Cupboards  Cupboards  Chests, ice  Wooden boxes, various  Screens				58 495 20 170 8 50       	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12
Cupboards, various  Boxes, various  Shelves, various  Wooden covers for jars  Screens  Traps, rat, boxes  Tables, various  Stretchers  Choppers  Chairs  Crutches  Filters  Crates  Shovels  Cupboards  Chests, ice  Wooden boxes, various  Screens  Cases, packing				58 495 20 170 8 50 	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12         Doors       3
Cupboards, various  Boxes, various  Shelves, various  Wooden covers for jars  Screens  Traps, rat, boxes  Tables, various  Stretchers  Choppers  Chairs  Crutches  Filters  Crates  Shovels  Cupboards  Chests, ice  Wooden boxes, various  Screens  Cases, packing				58 495 20 170 8 50 	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Saindals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12         Doors       3         Floor, wooden, tent       56
Cupboards, various  Boxes, various  Shelves, various  Wooden covers for jars  Screens  Traps, rat, boxes  Tables, various  Stretchers  Choppers  Chairs  Crutches  Filters  Crates  Shovels  Cupboards  Chests, ice  Wooden boxes, various  Screens  Cases, packing				58 495 20 170 8 50 	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12         Doors       3
Cupboards, various  Boxes, various  Shelves, various  Wooden covers for jars  Screens  Traps, rat, boxes  Tables, various  Stretchers  Choppers  Chairs  Crutches  Filters  Crates  Shovels  Cupboards  Chests, ice  Wooden boxes, various  Screens  Cases, packing				58 495 20 170 8 50 	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.         Bedsteads       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12         Doors       3         Floor, wooden, tent       56
Cupboards, various  Boxes, various  Shelves, various  Wooden covers for jars  Screens  Traps, rat, boxes  Tables, various  Stretchers  Choppers  Chairs  Crutches  Filters  Crates  Shovels  Cupboards  Chests, ice  Wooden boxes, various  Screens  Cases, packing				58 495 20 170 8 50 	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.         Bedsteads       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12         Doors       3         Floor, wooden, tent       56
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various Stretchers Choppers Chairs Crutches Filters Crates Shovels Cupboards Chests, ice Wooden boxes, various Screens Cases, packing Machines, mincing				58 495 20 170 8 50 	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12         Doors       3         Floor, wooden, tent       56
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various Choppers Chairs Crutches Filters Crates Shovels Cupboards Chests, ice Wooden boxes, various Screens Cases, packing Machines, mincing  Lids, tin, for jars Meshes for wire mattresses			TIN	58 495 20 170 8 50 Repared 87 253 40 5 2 10 78 23 380 8 3,723 1	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.         Bedsteads       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12         Doors       3         Floor, wooden, tent       56
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various Stretchers Choppers Chairs Crutches Filters Crates Shovels Cupboards Chests, ice Wooden boxes, various Screens Cases, packing Machines, mincing  Lids, tin, for jars Mashes for wire mattresses Cutting panes of glass			TIN	58 495 20 170 8 50 	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.         Bedsteads       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12         Doors       3         Floor, wooden, tent       56
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various Stretchers Choppers Chairs Crutches Filters Crates Shovels Cupboards Chests, ice Wooden boxes, various Screens Cases, packing Machines, mincing  Lids, tin, for jars Machines, mincing  Lids, tin, for jars Cases, packing Machines, mincing  Lids, tin, for jars Cases, packing Screens Cases, packing Screens Cases, packing Machines, mincing			TIN	58 495 20 170 8 50 Repared 87 30 7 253 40 5 2 10 78 23 380 8 3,723 1 USMITHS  New W	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.         Bedsteads       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12         Doors       3         Floor, wooden, tent       56          SHOP.         Vork.       2         Cases, tin       9         Boxes for keeping i.r.       4         Funnels       470         Pots, zinc       13
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various Choppers Chairs Crutches Filters Crates Shovels Cupboards Chests, ice Wooden boxes, various Screens Cases, packing Machines, mincing  Lids, tin, for jars Meshes for wire mattresses Cutting panes of glass Sprays, zinc, for ironing Baskets, wire, for tubes			TIN	58 495 20 170 8 50 	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.         Bedsteads       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12         Doors       3         Floor, wooden, tent       56          SHOP.         Vork.         Cases, tin       9         Boxes for keeping i.r.       4         Funnels       470         Pots, zine       13         Catchers, fly       53
Cupboards, various Boxes, various Shelves, various Wooden covers for jars Screens Traps, rat, boxes  Tables, various Stretchers Choppers Chairs Crutches Filters Crates Shovels Cupboards Chests, ice Wooden boxes, various Screens Cases, packing Machines, mincing  Lids, tin, for jars Machines, mincing  Lids, tin, for jars Cases, packing Machines, mincing  Lids, tin, for jars Cases, packing Screens Cases, packing Screens Cases, packing Machines, mincing			TIN	58 495 20 170 8 50 Repared 87 30 7 253 40 5 2 10 78 23 380 8 3,723 1 USMITHS  New W	Plugs, wooden       200         Chairs       25         Boards, various       287         Baskets, waste-paper       175         Wooden stands       126         Crutches       197         irs.         Bedsteads       6         Boxes       566         Carts       14         Trays, coffee       23         Poles, tent       10         Sandals, wooden, pairs       90         Boards, various       9         Ladders, step       4         Barrels       183         Shelves       20         Safes, meat       2         Baskets, waste-paper       12         Doors       3         Floor, wooden, tent       56          SHOP.         Vork.       2         Cases, tin       9         Boxes for keeping i.r.       4         Funnels       470         Pots, zinc       13

## Repairs.

						recput.	•					
Vermorels						145	Pots, e.w., for latrine	• • •				4
Formaline apparate	ne.	• • •	• • •	• • •	• • •	41	T 1 1 1		•••	• • •	• • •	$4\overline{5}$
			• • •		• • •	94	Lanterns for lamps	• •	• • •	• • •	• • •	104
Vermorel pipes			• • •	• • •	• • •	47		• • •	• • •	• • •	• • •	3
Ammonia apparatu		• • •	• • •	• • •	• • •	50	Stoves, paraffin	• • •	• • •	• • •	• • •	$\frac{\mathbf{s}}{66}$
Vermorel nozzles	• • •		• • •	• • •	• • •		Lamps, hurricane	•••	• • •	• • •	• • •	
Nozzles	• • •	• • •	• • •	• • •	• • •	59	Lamps, table, paraffin	• • •	•••	• • •	• • •	18
Water cans		• • •		• • •	• • •	148	Candlesticks	• • •	• • •	• • •	• • •	58
Pails, i.g	• • •	• • •		• • •	• • •	96	Pressers, potato	• • •	• • •	• • •	•••	6
Cans, tin, spirit	• • •		• • •		• • •	11		• • •	• • •	• • •	• • •	242
Covers, latrine pail				• • •		-5	Soldering tins	• • •	• • •	• • •	• • •	1,131
Lamps, spirit			• • •			107	Fitting glass panes	• • •	• • •	•••		585
Bedsteads			• • •			26	Pannikin trays		•••		•••	6
Ice chest		• • •		• • •	• • •	47	Coffee cans			• • •	•••	12
Pans, copper	• • •					92	Strainers, tin, soup		•••	•••		26
Boards, tin, diet	• • •		• • •	• • •	• • •	309	Zinc baths	•••	•••	•••		$\frac{1}{21}$
Cans, milk						415	Tattan barr				•••	4
			• • •	• • •	• • •	24	To 1	• • •		•••		$\frac{\pi}{5}$
Pots, zine		• • •	• • •	• • •	• • •	184	Egg beaters	• • •	• • •	•••	• • •	16
		* * *	• • •	• • •				•••	• • •	• • •	• • •	
Foot warmers		• • •	• • •	• • •	• • •	113	Ladles	• • •	• • •	•••	• • •	9
Wire tying, 1 kilo	• • •	• • •	• • •	• • •	•••	257						
•					-							
					$\mathbf{P} I$	AINTERS	' SHOP.					
Tables, various			• • •			328	Sofas					30
Chairs, various					• • •	324	Boards, tin, diet	• • •				295
Supports, various						166		• • •				17
Shelves, various	• • •	• • •			• • •	17	771		•••	•••	•••	$\overline{65}$
Cupboards, various						185	Carts, various				• • •	45
Roads various	• • •	• • •	• • •	• • •	• • •	301		• • •	• • •	•••		102
Boards, various		• • •	• • •	• • •	• • •	$\frac{301}{123}$		• • •	• • •	• • •	• • •	40
Bedsteads, various		• • •	• • •	• • •	• • •		Fire pails	• • •	• • •	• • •	• • •	
Screens, various	• • •	• • •	• • •	• • •	• • •	$\frac{42}{77}$	Tins, various	• • •	• • •	•••	• • •	49
Splints	• • •	• • •	• • •	• • •	• • •	77	Paper baskets	• • •	• • •	• • •	• • •	12
Boxes	• • •	• • •	• • •	• • •	• • •	605	Chests, 7-drawer	• • •	• • •	• • •	• • •	5
Step ladders	• • •	• • •	• • •	• • •	• • •	37	Rakes, garden	• • •	• • •	• • •	• • •	25
Wooden baskets, v	ariou	1S		• • •		180	Bed rests		• • •			15
Bed ticket holders				• • •		700	Cradles, bed					24
Lanterns, various						154	Extension apparatus					$\frac{2}{15}$
Machines, various						14	Filters					15
Lettering cupboard						138	Zinc covers					101
Barrels, various						137	Cans, i.g		١	•••	•••	308
Date of the loans.	• • •	• • •	• • •	•••	•••	20,	· · · · · · · · · · · · · · · · · · ·	•••	•••	• • •	• • •	000
1	Pair	ntino	dist	illin	g roo	133						
					ngine		.1					
						l el Marsû						
						ruments ste	ore.					
	Pair											
					mami							
7.	Lett	terin,	g bed	dstea	ids ai	nd doors of	K.A.H.					
							Suez Hospital.					
							Benha Hospital.					
							Kôm Hospital.					
11	Pair	ntino	fur	nitur	e of	Sisters' Ho	ouse, K.A.H.					
						O.H., Zaga						
12.	ı an	Tome	Luli	nour	OUL	J.II., Zagi	······································					

#### TENTMAKERS' SHOP.

## New Work.

Tents, two poles				38	Mattress cases	• • •	• • •		100
Tents, one pole			• • •	15	Mattresses, felt	• • •		• • •	9
Shamsîa, 2nd class tent			• • •	5	Sacks, disinfecting				91
Tents, 2nd class, with shams	sia			19	Valises, tent				85
Pads for splints				7	Rags, canvas, for travelling b	ed			22
Cushions for assiuti chair				2	Chairs, canvas				26
Pillows for dressing tables				5	Stools, canvas				$\overline{26}$
Pillows, cotton, long				72	Chairs for engineers				1
Cushions, chair				18	Chairs, upholstered				$\overline{4}$
Pillows, sofa				14	Sofa				î
Pillows, examination table			•••	7	Stretchers, canvas				$4\overline{8}$
Pillows, operation		•••	•••	6	Canvas, travelling bedstead	•••	•••	•••	$\frac{10}{20}$
Back cushions	• • •	• • •	• • •	$\frac{\circ}{2}$	Covers, dressing-table	•••	•••	•••	- <del> </del>
Chair cushions				$\tilde{2}$	Cover, weighing machine	•••	•••	•••	1
Mattresses, cotton				$68\overline{2}$	Covers, tent, cart				6
Mattresses, sofa				9	Covers, stretcher	• • •	•••	• • •	1
Mattresses, cotton, ex. table					Bottles, zinc, felt-covered				18
matticessos, cotton, cx. taore				7	Domes, zinc, ten-covered		• • •	• • •	40

## Repairs.

Sacks, tibn	*	. 15 . 19 . 47 . 4 . 12 . 2	,, operation	19 1 6 13 1
	-	IAILONS	SHOF.	
		New W	ork.	
Sheets	•• ••• •••	. 374 . 19 . 293 . 12 . 69 . 7	Covers, screen Protectors, khaki Curtains Towels Flag, hospital pattern Covering, bottles, G.I. Overalls, mos.	4 40 59 24 6 6 3 68
Haversacks, canvas		. 20 . 40 . 12	Uniforms, disinfectors 1 Waistcoats	72 .27 4 :10
		Repair	·s.	
Gallabias		. 2 . 2 . 6	Waistcoats Jackets 2	2 6 200

## X.—REPORT ON CAIRO SCAVENGING AND WATERING SERVICE.

## 1.—Street Area.

Extension of area in 1917 amounted to 43,395 square metres, of which 35,600 square metres were macadam roads and 7,795 square metres lanes paved with stone setts, bringing the total area of public roads under charge of the Service, at the end of the year, to 3,176,746 square metres.

A statement of areas and extensions for the last three years is appended:—

	Y	EAR.			Area.	Extension during Year.
					Square Metres.	Square Metres.
1915 1916 1917	•••	•••	• • •	•••	3,121,079 $3,133,351$ $3,176,746$	25,525 $12,272$ $43,395$

Earth roads of the approximate area of 500,000 square metres (Tanzim figures) are included in the above figures. This area is scavenged as far as credits allow.

Work on Private Account.—In addition to the figures given above, the Service also operates on an area of 81,143 square metres of macadamized private roads, against payment, being no increase on the 1916 figure.

#### 2.—Water Consumption.

Tabular statement of net consumption by the Scavenging and Watering Service for the past three years:—

	MONTH.					1915	1916	1917
					_ -	Cubic Metres.	Cubic Metres.	Cubic Metres.
January	• • •	• • •	• • •			15,514	18,300	15,606
February	• • •					19,924	18,608	31,666
March				• • •		34,566	39,577	50,888
April				• • •		48,293	67,387	63,587
May						53,709	73,301	64,007
June						76,517	85,497	71,295
July	,					71,689	78,868	77,580
August	• • •		• • •			75,378	74,965	73,123
September				•••		62,516	71,477	66,872
October			• • •	• • •		51,598	50,641	52,064
November			• • •			38,458	33,885	39,016
December	• • •		• • •	• • •		27,386	27,303	25,529
		$\mathbf{T}$	OTAĻ	•••	.  -	575,548	639,809	631,233

Rolling Stock.—After deduction of condemned material, sales to Army or Government Departments, and inclusive of new material purchased, the strength of rolling stock, etc., on charge of the Service, was as below:—

			1915	1916	1917
Double water vans	• • •	• • •	 78	80	80
Single water carts			 77	89	94
Double dust vans	•••	• • •	 73	77	81
Single dust carts			 208	203	213
Machine brushes			 38	40	40
Trolley carts			 13	13	13
Sewage carts			 20	34	33
Hand carts		• • •	117	. 120	126
Dust bins			470	477	513
Steam pumps			3	1	3
Hand pumps			$\ddot{6}$	$\tilde{6}$	$\ddot{3}$

During 1917 two single water carts were sold to the Army authorities. In 1917 seven water carts were returned from the twelve carts sold to the Army in 1916.

Comparative prices of new rolling stock for the last three years are shown hereunder:—

	19	915	1	916	1917		
	L.E.	м.	I.E.	м.	L.E.	М.	
Single dust carts	15	299	22	100	24	$\begin{array}{c} 377 \\ 163 \end{array}$	
Double dust vans	67	767	73	454	85		
Single water carts	23	540	34	$\frac{100}{450}$	40	359	
Double water carts, cylindrical	81	—	98		157	595	

Repairs were executed in Service workshops. New material was purchased from the Mechanical Department, Tura Prisons, and by adjudication.

Harness.—Made as usual at the Model Workshops. The prices were :—

	19	915	19	16	1917	
	L.E.	м.	L.E.	м.	L.E.	М.
Cinala haman	6	600	6 5	800. 200	8 5	500 200

Repairs were executed, as usual, in Service workshops.

TABULAR STATEMENT OF ANIMALS FOR THE LAST THREE YEARS.

	1915	1916	1917	
Animals cast:—  Mules  Horses  Donkeys		$-\frac{80}{2}$	$egin{array}{c} 40 \ 20 \ 1 \ \end{array}$	Inclusive of animals taken for Army purposes or drafted to Provinces.
	41	82	61	
Animals purchased:—  Mules	<del></del>	$\begin{bmatrix} -73 \\ -3 \end{bmatrix}$	$\begin{bmatrix} 13 \\ 32 \\ - \end{bmatrix}$	Supplied gratis by Army.
	84	76	45	
Strength at end of year:—  Mules  Horses  Donkeys	18	540 18 14	513 30 13	
	578	572	556*	

<sup>\*</sup> The shortage at the end of 1917 was not made good till beginning of 1918.

During 1917 no mules were available for 'purchase. In consequence, the Chief Veterinary Inspector, Ministry of Interior, arranged for the supply of cast army horses as required. These were supplied gratis, and have tided over the period of scarcity, but have not proved very successful, as it has been almost impossible to get them into good condition.

In November 1917 twenty mules were taken over by the Army for military purposes and replaced by cast Army horses in 1918.

Total of animal strength at the end of 1917 was:—

Mules... 513 Horses ... 30 Donkeys ... 13

Total ... 556, being below budgetary strength 36 animals.

Buildings.—No extension of stabling took place in 1917, as the Ministry of Finance refused to grant the credit applied for to build a masonry stable at Bab el Nasr.

Bicycles.—During 1917 no Scavenging and Watering Service bicycles were condemned but six additional bicycles were bought, as extension of reserve bicycles was found necessary.

During 1917 three Central Stores bicycles were struck off strength as past use and replaced, and no additional machines were bought, but eight additional machines were bought for the Provincial Offices of the Department in 1917.

Tabular statement of bicycle establishment in Cairo at end of:

	1915	1916	1917
Scavenging and Watering Service Central Stores	60 52	61 53	67 53
Total	112	114	120

Singer machines were still not available, and were replaced by the "New Hudson" model, and in certain cases, where these could not be supplied owing to war conditions, "Raleigh" type of bicycles was accepted, at the same rate, viz. L.E. 10.500 mill.

Average cost of repairs per bicycle per annum was:—

19	915	1	916	1917				
L. <b>E.</b>	м.	L.E.	м.	L.E.	м.			
3	408	5	094	4	483			

#### 3.—Forage.

Tibn.—Supplied, as in the previous year, direct from the Domains Administration.

Barley.—Supply of this was arranged by the Chief Veterinary Inspector, and came partly from the Domains Administration and partly from the Supplies Department, Egyptian Army; but barley from the latter source had to be cleaned here before issue, and, owing to scarcity, supply was irregular and difficult.

Bran.—Supplied from Tura mills, Egyptian Army, as usual.

Straw.—Supplied by a contractor after a public adjudication.

Bersîm.—Supplied by a contractor after a public adjudication.

								PR				
						19	915	1	916	19	17	
						L.E.	м.	L.E.	м.	L.E.	м.	•
Barley	• • •		•••	• • •		 8	301	9	094	9	576)	
Bran		• • •	• • •	• • •	• • •	 5	910	5	910	6	$\frac{261}{380}$	per ton of 1,000 kilos.
Tibn	• • •	• • •	• • •	• • •	• • •	 3		2	380	2		per ton or 1,000 knos.
Straw	• • •					 1	350	1.	100	1	280)	
Bersîm				• • •	• • •	 0	033	0	027	0	035	per qantâr of 100 rotls

Shoeing.—Average cost per set per month:—

19	915	1	916	1917			
L.E.	м.	L.E.	М.	L.E.	м.		
0	059	0	087	0	102		

The increase in 1917 was due to increased cost of iron and coal.

Refuse Disposal.—There was no change in the method of disposal of this during 1917, and the refuse dumps were not increased in number, but the Husseinia was abandoned in favour of a new site at Abbasîya at the request of the Tanzim.

The following are the details of the disposal of refuse in 1917, average daily output:—

A	NAME.			Single Dust Cart. 1 c.m. Capacity.	Double Dust Van. 2 c.ms. Capacity.
Madbah			•••	117	65
Shanawâni			• • •	65	_
Gîza	•••	• •••	• • •	8	41
Abbâsîya	•••	• •••	• • •	100	37
Shubra			• • •	30	3
Imbâba				45	
Matarîa	:	• •••		55	_
	Тота	L	•••	420	146

In addition, 144 single dust cart loads were delivered daily to fifty-nine native baths, against payment, and thirty tons of rubbish were daily burnt at the destructor.

Reckoning a cartload of one cubic metre as about one-third ton weight, the total daily output was in 1917:—

or, for the whole year, 114,975 tons.

TABULAR STATEMENT OF RUBBISH OUTPUT FOR THE LAST THREE YEARS.

	1915	1916	1917
	Tons.	Tons.	Tons.
Tipping	54,020	72,468	86,505
Native Baths	20,440	18,666	17,520
Destructor	10,950	10,980	10,950
TOTAL	85,410	102,114	114,975

The whole question of refuse disposal is becoming more serious every year, as the present dumps are becoming very congested, and when these sites are entirely full new sites must be selected further afield, entailing an increase of staff of men, carts, and animals and stabling in order to cope with the longer distances. In this connection I suggest obtaining, after the war, motor lorries which could remove the refuse from one or two tips near the town and transport it to some more distant site in the desert, where it could be dumped without causing a nuisance or be in the way of town extension. This would save the expense of extra staff and stabling, and would be, in my opinion, an altogether cheaper and more efficient method of disposal.

Drainage Transport Service.—There has been extension of this in 1917 of five carts, mules, and harness.

Municipal Supplies Service.—During 1917 the credit for this work (L.E. 3,000) was exceeded by L.E. 2,007, owing partly to higher cost of material and partly to extra materials demanded by some of the Municipalities and Local Commissions.

Stables.—The Abul Ela stable belonging to this Service was still retained in 1917 by the Army, and, in consequence, stabling accommodation for the Service remained limited.

Work for Army Account.—This continued as in 1916, refuse being removed from the same offices in Cairo, against payment, the Army loaning a pair of mules, which were fed and maintained by the Service.

Destructor.—Annual upkeep, inclusive of screening, was :—

1915	1916	1917
L.E.	L.E.	L.E.
1,268 .	1,247	1,257

Average cost per day, inclusive of non-working periods, was :—

1915	1916	1917				
L.E. M.	L.E. M.	L.E. M.				
3 474	3 417	3 445				

Upkeep of Taps.—The following was the expenditure under this head in :—

1915	1916	1917
L.E.	L,E.	L.E.
367	395	499

The increase in 1917 was due to the increased cost of material.

Daily-Paid Labour.—

	1915	1916	1917
Drivers:— Water Cart	114	120	141
D and Comb	334	349	356
Sweepers	510	595	610
Miscellaneous	75	82	58
TOTAL	1,033	1,146	1,165

Owing to the difficulty of obtaining suitable drivers, due to the competition of the Egyptian Labour Corps and Army demands for native labour, the pay of drivers was in 1917 raised from 50 milliemes per day to 60 milliemes for single mule carters, and from 60 milliemes to 70 milliemes for double mule carters. This involved an increase of the labour chapter of L.E. 799.

## XI.—GENERAL.

## 1.—BUDGET.

The Budget for the year A	pril	1, 1	917,	to N	Iarch	31,	1918,	was	fixe	d at	• • •	L.E.	459,866
That for 1916 was fixed at	• • •	•••	• • •	• • •	•••	•••	• • •	•••	• • •	• • •	• • •	"	385,281
Showing an increase of	• • •	•••	• • •	•••	• • •	•••	• • •	• • •	• • •	• • •	•••	22	74,585

		1917	1916	Increase.	Decrease.
	CHAPTER I.—CENTRAL SERVICES,	L.E.	°L.E.	L.E.	L.E.
	Inspectorates, Hospitals, etc.				
.rt.	1. Salaries, wages, and allowances	188,009	176,576	11,423	
,	2. Transport, transfers, and travelling allowances	15,104	15,234	_	130
"	3. Food	33,402	30,926	2,566	
"	4. Forage	924	882	42	
"	5. Rent, water, light, and disposal of sewage	18,351	14,140	4,211	_
"	6. Books and periodicals	403	403	_	
"	7. Telephones and telegrams	1,453	1,243	210	<u> </u>
"	8. Petty expenses	3,579	3,371	208	_
"	9. Purchase of animals	904	1,040		136
,,	10. Free water fountains	3,000	3,000		_
"	11. Stores	96,915	51,525	45,390	_
"	12. Uniforms	929	720	209	_
"	13. Upkeep of material and equipment	4,030	1,661	2,369	_
,,	14. Upkeep of motor cars	926	450	476	_
"	15. Supplies to Provincial Councils	3,200	2,500	700	
,,	16. Allowances to sanitary barbers	600	1,200		600
"	17. Upkeep of buildings	5,976	5,919	57	
"	18. Alterations to buildings	800	800		
"	19. Disinfecting ships at the ports	6,000	4,800	1,200	_
,,	20. Maintenance of temporary lazarets at Gabbari	4,560	4,560	. —	_
"	21. Experimental work at the institutes	300	300	-	
"	22. Sanitary improvements in mosques	2,500	_	2,500	_
"	23. New Works	16,187	24,840	_	8,653
	Carried forward	408,142	346,090	71,571	9,519

## TABLE LVII—(continued).

	1917	1916	Increase.	Decrease.
	L.E.	L.E.	L.E.	L.E.
Brought forward	408,142	346,090	71,571	9,519
CHAPTER II.—SCAVENGING AND WATERING SERVICE.				
Art. 24. Salaries, wages, and allowances	27,708	23,579	4,129	. —
" 25. Uniforms	396	450	_	54
" 26. Forage and shoeing	12,114	. 11,424	690	_
,, 27. Water	5,972	5,913	59	_
" 28. Lighting and disposal of sewage	100	205	· 	105
,, 29. Upkeep and repairs to plant and material	2,270	2,270	_	_
" 30. Material	7,430	5,608	1,822	-
" 31. Stores, etc., sold to Municipalities and Local Commissions	3,000	3,000	_	
" 32. Telephones and telegrams	60	60	_	_
" 33. Petty expenses	100	100	_	
" 34. Purchase of animals	1,073	1,096	_	23
" 35. Upkeep of gullies	1,705	1,460	245	·
	61,928	55,165	6,945	. 182
To deduct:	470,070	401,255	78,516	9,701
Recoveries of services rendered	10,204	15,974	5,770	
Total	†459,866	*385,281	84,286	9,701
Net increase	_		74,	585
* Original grant				L.E. 5,449
By transfer to the Minis	try of the Interior	r	· —	168 5,281
† Original credit	•••			9,866
To add: Supplementary credits  To deduct:—			L.E. 4,500	
Transferred to Frontier Dist	cricts Administration	on	3,302	1,198
	Total	TOTAL f expenditure		1,06 <b>4</b> 5,08 <b>2</b>
		ECONOMY	_	5,982
•			===	

Further provision for the cost of services rendered to this Department has been made in the budgets of the following Departments:—

										1917	1916
Ministry of	of Fin	anc	e (S	tatio	nery	Offi	ce)	•••	•••	1,540	1,540
,,	,	,	(P	ost (	)ffice	e)	•••	•••	• • •	1,971	1,972
"	,	,	(C	ustoi	ns)	•••	•••	•••	•••	<b>55</b> 0	550
Provinces	and 6	dov	erno	rates	(Po	lice)	•••	•••		228	228
Pensions	•••	•••	• • •	• • •	•••	•••	• • •	•••	• • •	12,476	11,961
					То	TAL	•••	•••	•••	16,765	16,071

## TABLE LVIII.—New Works.

	1917	Expended.
	L.E.	L.E.
Purchase of 4 mules and 2 carts for Cairo Inspectorate	302	_
" of 1 motor car and 7 motor bicycles for the Epidemic Section	725	793
Fitting up provincial plague stores	500	443
Construction of a store and a motor garage for 2 motor ambulances at Abbasîya Infectious Hospital	660	487
Completion of work at Alexandria Hospital and purchase of utensils	319	285
New verandah for out-patients and making roads in grounds at Alexandria Hospital	1,140	1,081
Completion of building for sisters at Alexandria Hospital	91	_79
Extension of Abbasîya Infectious Hospital	2,300	137
Purchase of a new hot-water boiler and 2 new washing machines at Qasr el Aini Hospital	270	_
Equipment for the Suez Hospital Laboratory	50	
Repairs at Hôd el Marsûd Hospital	3,500	3,454
Vaccine Institute equipment	100	_
Hygienic Institute accommodation	250	_
Initial cost of scavenging and watering new roads	208	92
Prophylactic measures against ankylostoma	500	166
Prophylactic measures against cholera	3,772	2,195
Construction of a second storey for accommodation of inventory clerks in the Central Stores	1,500	1,060
Equipment, Sohag Ophthalmic Hospital		12
Conversion of boiler at Qasr el Aini Hospital	_	70
Equipment, Shibîn el Kôm Ophthalmic Hospital		41
Equipment, Minya Ophthalmic Hospital	_	18
Total	16,187	10,413

2.—STAFF.

TABLE LIX.—PERMANENT EMPLOYEES.

CATEGORY.	1917	1916	CATEGORY.	1917	1916
Technical.			$Brought\ forward\ \dots$	283	175
Director-General	1	1	Midwives	44	44
Assistant Director-General	1	. 1	Director of Stores	1	1
Directors of Sections	4	3	Chief Inspector of Pharmacies	1	1
President, Medical Commission	1	1	Assistant Inspector of Pharmacies	2	1
Inspector, Cairo City	1	1	Pharmacists, 3rd class	4	4
Inspectors (special class)	2	2	,, 4th ,,	15	14
Divisional Inspectors	7	7	Assistant Pharmacists	5	5
Sub-Directors of Sections	3	2	Chief Inspector, Scavenging and	(	
Vice-President Medical Commission	1	1	Watering Service	1	1
Inspectress	1	1	Inspector, Scavenging and Watering Service	1	1
Inspectors, 2nd class	6	7	Assistant Inspector, Scavenging and		
,, 3rd ,,	19	18	Watering Service	1	1
Sanitary Engineer, 1st class	1	1	Inspector	1	1
,, ,, 2nd ,,	1	1			
" " " 3rd "	2	1			
Director of Technical Institutes	1	1	Clerical.		
Bacteriologist, 1st class	1	1	Directors of Service	2	2
Bacteriologists, 2nd "	2	2	Sub-Directors of Service	2	2
" 3rd "	2	2	Chefs de Bureau	2	2
Assistant Bacteriologists	6	4	Sous-Chefs de Bureau	4	4
Chemists, 2nd ,,	2	2	Employees, 1st class	10	9
" 3rd "	2	2	,, 2nd ,,	18	18
Assistant Chemists	2	$2 \mid$	" 3rd "	38	32
Director, Alexandria Hospital	1	. 1	,, 4th ,,	130	125
Sub-Director of Hospital	1	_	Chief Storekeeper	1	1
Medical Officers, 1st class	1	1	Storekeepers, 2nd class :	2	2
" " " 2nd "	3	4	" 3rd "	3	2
" " " 3rd "	8	8	" 4th "	11	8
$,, \qquad ,, \qquad  ext{4th}  ,,  \left\{ egin{array}{ll} \operatorname{Cat.} A \dots \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	22 178	23   174			
Carried forward	283	175	Total	582	556

TABLE LX.—TEMPORARY EMPLOYEES.

CATEGORY.	1917	1916	CATEGORY.	1917	1916
Medical Officers Inspectors (Epidemics) Inspector (Stores) Engineers Matrons Nursing Sisters Assistant, Laboratory, 1st class Clerks  Carried forward	$\begin{array}{c c}  & 4 \\  & 6 \\  & 3 \\  & 25 \\  \hline  & 192 \\  & - \end{array}$	42 4 1 5 3 24 1 211 	Brought forward Works foremen Mechanic Meter inspector Stable masters Director, Antirabic Institute Storekeepers Inspector, Provincial Clerks Midwives	$egin{array}{c} 2 \\ 1 \\ 2 \\ 1 \end{array}$	291 1 1 3 1 17 — 316

TABLE LXI.—Hors Cadre Employees engaged in 1917.

CATEGORY.	1917	1916	CATEGORY.	1917	1916
Chief attendants  Male  Female  Assistants, Laboratory, 2nd class  """  """  """  """  """  """  """	314 126 5 6 9 12 30	77 279 128 5 5 9 12 32 	Brought forward  Cooks Printers Overseers Moawens Sanitary Barbers Mechanics Various categories  Total	$ \begin{array}{r} 47 \\ 3 \\ 31 \\ 23 \\ 16 \\ 1 \\ 932 \\ $	$ \begin{array}{c c} 547 \\ 45 \\ 3 \\ 31 \\ 20 \\ 173 \\ 1 \\ 800 \\ \hline 1,620 \end{array} $

# 3.—AUTHORIZATIONS TO PRACTISE THE MEDICAL AND ALLIED PROFESSIONS.

TABLE LXII.

			NATIONALITY.										
Profession.	٠	Local Subjects.	Ottomans.	British.	French.	Greek.	Italian.	German.	Austrian.	American.	Persian.	Russian.	TOTAL.
Medical		7 8 1 9	2 - 1 -	1 1 1 -			1						50 13 13 11

## 4.—LEGAL.

The following enactments, bearing on the work of the Department, were published in 1917:—

- (1) Two arrêtés making additions to the list of "Etablissements Incommodes, Insalubres et Dangereux," Class I, Category A:—
  - (a) Arrêté of January 3, 1917, re cold storage establishments.
- (b) Arrêté of November 20, 1917, re establishments for the preparation and the conservation of fish other than fissikh.

Law No. 9, 1917: Modification of Art. 5, Decree of December 17, 1890, re vaccination. Law No. 10, 1917: Enacting certain prophylactic measures against cholera.

8

 $\mathfrak{S}^{\mathfrak{I}}$ 

136

79

155

13

**31** 

56

196

422

1,616 TOTAL 1916 1,835 2638 10 58 <u>01</u> 6 123 11 624TOTAL. 1917 179 8 9 Beheira. 127 70 ಣ 68 10 Daqahliya. 933 CI 0 Sharqfa. 5, <u>01</u> 26 7.7 Minufiya. 12 350 32 03 51 Gharbiya. 9 7 Qalyûbîya. 15 -4 Aswan. 145 Сепя. 126 ಣ 70 -11 Girga. 52 159 10 S Asyut. 9 111 Minia, 65 <u>с</u>1  $\vdash$ Beni Suef. **CJ** 86 16 <u>01</u> 11 Fayûm. ा -41 99 -.nzîĐ 36 1 ·zəng 6 Damietta. 11 Jemailia. 17 101 Port Said. 106 194 I 31 Cairo. Inhumation, exhumation, and transport of bodies abroad. Regulations, approved by Conseil Sanitaire International, of September 15, 1876, and March 26 Permanent and exceptional measures to prevent epidemics. Arrêtés of May 11, 1895, and December 19, 1904 of January 29, 1894 Enclosure of cemeteries: unauthorized inhumation. Arrêté of Cholera. Arreté of October 17, 1895, and supplement-May 27, 1899, modified No. 10 of Arrêtés of Arrêté 1886, by 17, 1890, modified : : of June 15, 1893 တ် Passenger control in case of cholera abroad. of January 21, 1911 ... ... ... November Plague and cholera. Decree of May 27, 1899 by Laws No. 3 of February 16, 1911, and Practice of medicine. Arrêté of June 13, 1891 pidemics. pidemics. Vidange and dépotoirs. Arrêté of Nomodified by Arrêté of June 2, 1910 Transfer of cemeteries. Decree Vaccination. Decree of December Decree of August 6, 1897... ... Disinfection of houses during e May 23 and June 26, 1901 NAME OF LAW Enclosure of waste lands. Arrêté and October 30, 1877 ... Oysters and shell-fish during e ary Arrêté of May 30, 1896 Decree of March 12, 1898 : PROPHYLACTIC MEASURES:-June 16, 1912 April 27, 1913 CEMETERIES:-

TABLE LXIII.—Contraventions against Public Health Laws.

									<del>-</del> (	59 —	-							
1	4,110	35	61	20	H	32	87	1,075	808	88	643	437	10,084	8,915	320	509	340	
1	2,677	16	7.2	N	. 1	1	61	1,158	626	41	889	379	9,028	7,686	238	351	714	\$ 39
1	80		्र ।	1	- 1	1	9	66	52	1	-	21	453	397	4	6.	4	39
1	131	83	10	1		1	20	41	[-	T	ಣ	70	417	336	19	28	34	1
	196		П		1	1	26	46	40	1	18	21	451	385	22	15	66	1
1	899	$\infty$			1	1	0	59	36	1	1	ı	1,123	1,037	22	24	40	
	413	কা	9	1	1	1	9	171	47	જ	ನಾ	19	1,117	1,031	20	46	20	
1	25	H	ಣ	1		1	က	9	67	16	Ţ	ಣ	112	27	2	9	67	
1	20	1						18	[-			H	65	44	111	9	4	1
1	116		-		1			230	ಣ		1	<b>H</b>	501	470	7	18	9	
1	. 115	1	2	1			1	98	40	1		12	410	357	6	30	14	
	490	H	H	1			2)	82	205		1	20	998	996	9	ಣ	23	1
	55	H	rO.	1			1	114	20	-	L- '	29	349	291	16	ಣ	39	
1	31		्य					32	13		ಣ	130	245	133			110	
1	13	-	কা				1	51	47	67	H	2	241	122	24	06	70	
	35		[	1	1	1	ઝા	57	26	П		70	213	174	17	70	17	
1	16	1	2	1			1		13	たつ	7	H	62	79				1
	<u></u>					1		1	1				17	17				
	1	<u>.</u>	<u>ଚ</u> ୀ	1		1		9	H		17		54	08	1	10	17	1
1		1		1	1	1		$\infty$	37	T		6	174	162	्य	9	41	
1	35	1	27	<u>01</u>				40	320	13	835	. 95	2,009	1,558	51	51	349	
Navigation on the Mahmudia Canal in time of cholera. Arrêté of January 16, 1911	Prophylactic measures against infectious diseases. Law No. 15 of June 12, 1912	Excavations and birkas near habitations. Decree of April 26, 1900	Pharmacy and sale of poisons. Law No. 14 of September 15, 1904	Assistant pharmacists. Law No. 20 of November 17, 1911	Transport of rags during epidemics. Law No. 1 of March 10, 1906, and Arrêté of October 30, 1913	Control of returning pilgrims. Arrêté of June 14, 1914	Public latrines and dépendances of mosques and zawias.  Law No. 14 of July 1, 1911	Births and deaths. Decree of August 11, 1912	Etablissements incommodes, insalubres et dangereux. Law No. 13 of August 28, 1904, and Arrêté of August 29, 1904, completed by Arrêté of June 11, 1905	Cleanliness of streets. Arrêté of June 7, 1913	Adulteration of milk under Article 302 of the Penal Code	General sanitary contraventions. Native Penal Code, Arts. 334, 335, and 336, and Mixed Penal Code, Art. 333, para. 6	Total Number reported	Convictions obtained	Acquittals	Filed	Under consideration	Transaction



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